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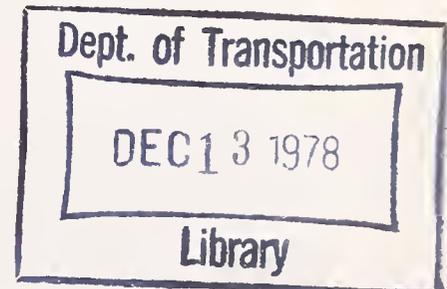
MULTINATIONAL ACTIVITIES OF MAJOR
U.S. AUTOMOTIVE PRODUCERS
Volume II -- Data on Foreign Facilities and Operations

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FINAL REPORT



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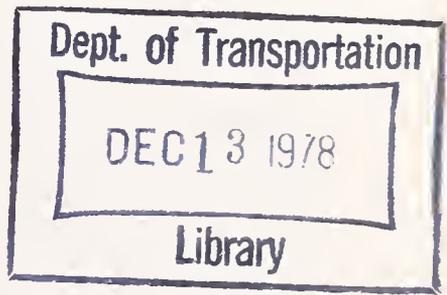
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16. Abstract

The multinational activities of General Motors, Ford, Chrysler, and American Motors are documented and analyzed. The study consists of this and four other volumes. Volume I is a summary of the four main volumes. In Volume III, the research, development, and engineering activities abroad are analyzed. Volume IV provides a preliminary assessment of the technology transfers within each U.S. multinational producer. Volume V examines the diffusion of production and sales operations abroad; the timing and location of these investments are shown consistent with the Product Life Cycle Theory of International Trade and Investment.



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FOREWORD

The objective of Volume II is to present data gathered from several sources, public and private, about the multinational activities of the four major U.S. automotive producers. No attempt is made to interpret or analyze the data in this report.

However, Volumes III, IV, and V provide evaluations of several aspects of multinational activity of the U.S. automotive producers. Volume III focuses on research, development and engineering activities abroad. Volume IV provides a preliminary analysis of the international patterns of technological innovation and transfer. Volume V analyzes the diffusion of production and sales operations abroad.

The topics covered in Volumes III, IV, and V indicates the kinds of data collected for Volume II. First, a considerable amount of data are presented on the worldwide research, development, and engineering activities of the major U.S. producers. Much of this data is either unavailable or not available readily from other public sources. Second, data are provided on the location and extent of production operations abroad as of 1976/1977. Third, similar data are provided for sales and marketing activities abroad. Again, comprehensive data on these topics were not available readily nor presented in a single source. Fourth, Part Two of Volume II provides data on production and sales abroad that are aggregated for General Motors, Ford, and Chrysler Corporation. These data are for several variables (sales levels, employment, ownership, etc.) classified generally by either primary activity

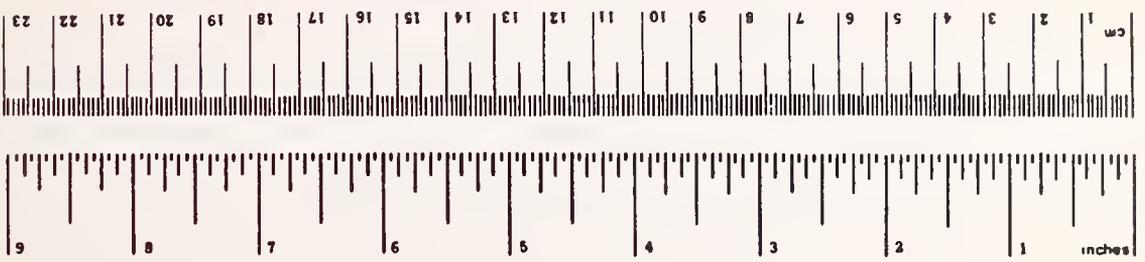
(sales and manufacturing) or geographic location. They are published for the first time.

Although the data come partly from company published sources and interviews with managers of General Motors, Ford, Chrysler, and American Motors, the reader should not infer that the four U.S. producers officially endorse the data contained in this report.

METRIC CONVERSION FACTORS

Approximate Conversions to Metric Measures

Symbol	What You Know	Multiply by	To Find	Symbol
LENGTH				
in	inches	2.5	centimeters	cm
ft	feet	30	centimeters	cm
yd	yards	0.9	meters	m
mi	miles	1.6	kilometers	km
AREA				
in ²	square inches	6.5	square centimeters	cm ²
ft ²	square feet	0.09	square meters	m ²
yd ²	square yards	0.8	square meters	m ²
mi ²	square miles	2.6	square kilometers	km ²
ac	acres	0.4	hectares	ha
MASS (weight)				
oz	ounces	28	grams	g
lb	pounds	0.45	kilograms	kg
	short tons	0.9	tonnes	t
	(2000 lb)			
VOLUME				
tblsp	tablespoons	5	milliliters	ml
tsps	teaspoons	15	milliliters	ml
fl oz	fluid ounces	30	milliliters	ml
c	cups	0.24	liters	l
pt	pints	0.47	liters	l
qt	quarts	0.95	liters	l
gal	gallons	3.8	liters	l
ft ³	cubic feet	0.03	cubic meters	m ³
yd ³	cubic yards	0.76	cubic meters	m ³
TEMPERATURE (exact)				
°F	Fahrenheit temperature	5/9 (after subtracting 32)	Celsius temperature	°C



Approximate Conversions from Metric Measures

Symbol	What You Know	Multiply by	To Find	Symbol
LENGTH				
mm	millimeters	0.04	inches	in
cm	centimeters	0.4	inches	in
m	meters	3.3	feet	ft
m	meters	1.1	yards	yd
km	kilometers	0.6	miles	mi
AREA				
cm ²	square centimeters	0.16	square inches	in ²
m ²	square meters	1.2	square yards	yd ²
km ²	square kilometers	0.4	square miles	mi ²
ha	hectares (10,000 m ²)	2.5	acres	ac
MASS (weight)				
g	grams	0.035	ounces	oz
kg	kilograms	2.2	pounds	lb
t	tonnes (1000 kg)	1.1	short tons	
VOLUME				
ml	milliliters	0.03	fluid ounces	fl oz
l	liters	2.1	pints	pt
l	liters	1.06	quarts	qt
l	liters	0.26	gallons	gal
m ³	cubic meters	35	cubic feet	ft ³
m ³	cubic meters	1.3	cubic yards	yd ³
TEMPERATURE (exact)				
°C	Celsius temperature	9/5 (then add 32)	Fahrenheit temperature	°F



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PART ONE

DATA FOR EACH MAJOR U.S. AUTOMOTIVE
PRODUCER ON ITS RESEARCH, DEVELOPMENT,
ENGINEERING (RD&E), PRODUCTION AND
SALES OPERATIONS AND FACILITIES ABROAD:
GENERAL MOTORS CORPORATION, FORD MOTOR
COMPANY, CHRYSLER CORPORATION AND
AMERICAN MOTORS CORPORATION

SUMMARY

Data are provided from public and private sources on three aspects of multinational involvement for General Motors Corporation, Ford Motor Company, Chrysler Corporation, and American Motors Corporation. The three aspects are:

- 1) research, development, and engineering activities abroad;
- 2) production activities abroad;
- 3) sales activities abroad.

For all three activities the data focus primarily on automotive operations related to passenger vehicles. In some instances the data include other business activities abroad besides passenger vehicles because it was not feasible or possible to separate them.

In Part One, the data emphasize the foreign operations of General Motors and Ford. The reason for this emphasis is that the foreign operations of these two multinationals are considerably more extensive than the foreign activities of either Chrysler Corporation or American Motors Corporation.

Also, the data are not completely homogeneous or comparable across the four companies. This is particularly true for the data on research and development (R&D) operations abroad because interviewees had different interpretations about what should be included as R&D activity.

Where possible, we have tried to report both a narrow estimate of R&D activities and a broader definition (RD&E) that includes engineering and design activities that result, according to company sources, in new or improved products and processes.

In general, however, the data on R&D abroad for General Motors favors the broader definition, (i.e. RD&E), while similar data for Ford uses the narrower interpretation that is designated simply as R&D.

Unless otherwise noted, data on the foreign production and sales operations of the four U.S. producers include only consolidated, majority-owned affiliates. Consequently, minority-owned subsidiaries with manufacturing or assembly operations are excluded as are non-consolidated, independent foreign dealerships from the sales data.

Also, unless otherwise noted, the terms "abroad, foreign, or overseas" refer to operations outside the United States and Canada. This interpretation should not be construed as any slight to our Canadian friends on our part, but simply the way the U.S. automotive producers consolidate data for North American operations.

In Part Two, the data come from the databank of the Harvard Business School's Multinational Enterprise Project. Special programs were written to access the data for General Motors, Ford, and Chrysler Corporation and to reformat the data for variables related to principal activity, location, size, ownership, markets, etc.

AMC is omitted since its multinational diffusion is considerably limited, especially relative to the other three U.S. automotive producers.

In every exhibit, the data represent the number of foreign subsidiaries for various variables. For example, Exhibit 1 of Part Two shows the number of foreign subsidiaries "alive" (still operating) in 1976 for several different activities (manufacturing, sales, etc.)

The term "latest" refers to 1976.

The term "at entry" refers to when subsidiaries joined their respective multinational systems.

The term "existed" refers to when subsidiaries left the multinational system.

The term "other" refers generally to non-manufacturing and non-sales subsidiaries that are essentially financial subsidiaries or subsidiaries established for parts distribution and warehousing.

The term "unknown" refers mainly to extremely small sales subsidiaries with sales of less than \$1 million, according to the Harvard Project's data coordinator.

Finally, please note that subsidiaries under the R&D category register zero in all exhibits of Part Two. The zero result means no subsidiary has been created or acquired abroad whose sole or primary purpose is to perform research and development. This conforms with our findings discussed in the Report on the Evaluation of R&D Abroad (Report #2). Separate subsidiaries have not been formed by the major U.S. automotive producer, though U.S. multinationals in other industries have created them, for R&D purposes. However, other data from our research and the HBS databank show R&D has been performed abroad within (and secondary to) subsidiaries established primarily for manufacturing purposes.

1. GENERAL MOTORS CORPORATION

1.1 RESEARCH, DEVELOPMENT, AND ENGINEERING ABROAD

By 1977, General Motors had eleven ongoing RD&E operations in nine countries besides the United States.

Data are provided in Exhibits A-1 through A-16 which identify the approximate magnitude, composition, location, purpose and nature of RD&E performed abroad by General Motors by the end of 1977. Also, data are included on several other variables related to R&D operations abroad.

Exhibits A-17 through A-25 present organizational charts of the principal foreign subsidiaries with RD&E capability.

Exhibit A-1

General Motors Corporation

Estimated R D&E Expenditures Abroad 1972-1976

	<u>Total Millions \$</u>	<u>Estimated \$ R D&E Performed Abroad</u>	<u>% R D&E Performed Abroad</u>
1976	\$1,257	\$276	22%
1975	1,114	234	21%
1974	1,125	236	21%
1973	1,018	204	20%
1972	880	110	12%

Source: Total figures are from 10K's. Other figures based on private interviews with company officials.

Exhibit A-2

General Motors Corporation

Sales, Net Income, & R D&E Expenditures in 1976

(In millions of dollars)

	<u>Total</u>	<u>U.S.</u>	<u>Canada</u>	<u>Other</u>
Sales*	47,181	39,785	5263	7495
Net Income	2,903	2,380	174	348
R D&E	1,257	968	13	276

*Includes intercompany sales of \$5362.

Source: Private interviews with company officials
and consultant's calculations.

Exhibit A-3

General Motors Corporation

R D&E Expenditures as a Percentage of Sales and Net Income
In 1976 Classified by Geographic Area

R D&E As a Per Cent of Sales

	<u>Total</u>	<u>U.S.</u>	<u>Canada</u>	<u>Other Abroad</u>
% R D&E	2.7	2.4	insignificant	3.7

R D&E As a Per Cent of Net Income

	<u>Total</u>	<u>U.S.</u>	<u>Canada</u>	<u>Other Abroad</u>
% R D&E	43	41	7.	79

Source: Consultant's calculations.

Exhibit A-4
General Motors Corporation
The Geographic Location of Research
and Engineering Facilities in 1976

	<u>In thousands of square feet</u>	
Worldwide Research & Engineering Facilities	18,646	100%
U.S.-Based Research & Engineering Facilities	14,306	77%
Foreign-Based Research* and Engineering Facilities	4,340	23%

*effectively none.

Source: 1976 10K

Exhibit A-5
General Motors Corporation
Research and Engineering Facilities
(In thousands of Square Feet)

	<u>Worldwide</u>	<u>U.S.</u>	<u>Canada</u>	<u>Other Foreign</u>
1976	18,646	14,306	204	4136
1975	18,289	14,266	204	3819
1974	17,818	13,903	167	3748
1973	17,391	13,607	216	3568

Source: 10K's General Motors, Item 3 (Properties.)

Exhibit A-6

General Motors Corporation

Research and Engineering Facilities

Percentage Analysis

	<u>Worldwide</u>	<u>U.S.</u>	<u>Canada</u>	<u>Other Foreign</u>
1976	100%	77%	1%	22%
1975	100%	78%	1%	21%
1974	100%	78%	1%	21%
1973	100%	78.3%	1.2%	20.5%

Source: Consultant's calculations based on data in 1973-1976 10K's.

Exhibit A-7
General Motors Corporation
The Geographic Distribution of Facilities Abroad Used
for Research and Engineering in 1976
(Excludes Canada)

	<u>In Thousands of Square Feet</u>	<u>% Abroad</u>
Total "Overseas" Research and Engineering Facilities	4136	100%
	<u>Estimated</u>	
A) Europe	2689	65% GM Ltd.
B) Latin America	620	15%
C) Australia and Far East	620	15% Holden only
D) Middle East and S. Africa	207	5% S. Afr. only

Source: "Total" figure from GM's 1976 10K.
Area estimates from company interviews.

Exhibit A-8
General Motors Corporation
Estimated Worldwide R D&E Expenditures for 1977 and
their General Composition

	<u>Millions \$</u>	<u>%</u>
1977 Total	\$2000	100%
Fundamental Research	75	4
Applied Research and Development and Engineering for fuel economy, emission control, safety	1750	87
Other Development Engineering and Design	175	9

Source: Company interviews.

Exhibit A-9

General Motors Corporation

Estimated Research, Development and Engineering Performed
Abroad by General Motors in 1976

	millions <u>Est. \$</u>	<u>%</u>
Total R D&E Performed Abroad	276	100%
Research Abroad*	14	5%
Development Abroad	124	45%
Engineering Abroad		
Design Abroad	97	35%
Environmental Activities Abroad	41	15%

*Contract out all Research work abroad in Germany.

Source: Company interviews.

Exhibit A-10

General Motors Corporation

Total R D&E Abroad

	<u>Research</u>	<u>Development*</u>	<u>Engineering*</u>
1 year or less	0	100%]	100%]
1 to 4 years	90%		
4 to 8 years	10%		

* A considerable amount of development and engineering work is one year or less; however, new product work is tied to longer model cycle.

Source: Company interviews.

Exhibit A-11

General Motors Corporation

The Classification of Worldwide R D&E Abroad in
1976 by Primary Type of Activity

		<u>Primary Purpose is to Perform</u>	
<u>Total RD&E Worldwide</u>		<u>Indigenous Technology Work(1)</u>	<u>Multinational Technology Work(2)</u>
Millions \$	1257	1257	0
"	% 100	100	0
 <u>R D&E Abroad</u>			
Millions \$	276	276	0
	% 100	100	0

(1) Indigenous technology work is R D&E work to develop new or improved products and processes expressly for a national or local market.

(2) Multinational technology work is R D&E work to develop new or improved products and processes expressly for near simultaneous manufacture or utilization in two or more major world markets of a national enterprise.

Source: Company interviews.

Exhibit A-12

General Motors Corporation

Nature of GM's RD&E Abroad

Of Total RD&E Performed
Abroad, Does GM perform
RD&E on: (yes or no)

- | | |
|---|-----------------|
| (1) Downsizing for fuel economy: | yes |
| (2) Combustion processes and
alternative fuels: | yes |
| (3) Conventional Engine Studies: | yes |
| (4) Energy Conservation Plant and
Process Engineering: | yes |
| (5) Alternate Engine Studies: | Mostly all U.S. |

Source: Company interviews.

Exhibit A-13

General Motors Corporation

R D&E Abroad for Alternate Power Plants

<u>Alternate Power Plants GM is working on</u>	<u>Any R D&E Performed Abroad by GM?</u>
(1) Jet-ignition stratified charge engine.	All U.S. but not really significantly different technology to be called "alternate".
(2) Direct injection stratified charge (DISC) engine.	All U.S. but not really significantly different technology to be called "alternate".
(3) Gas turbine engine for passenger cars.	All U.S. - none abroad.
(4) Diesel engines for passenger cars.	Yes: Germany (in-house) and Japan (Isuzu)
(5) Battery-Powered Electric Vehicles	Yes: Taiwan - tech exchange program with Taiwanese government.
(6) Alcohol-fuel engine.	Yes: Brazil (in-house).
(7) Rotary engine (discontinued but monitoring)	None abroad.

Source: Company interviews.

Exhibit A-14

General Motors Corporation

Estimated R D&E Expenditures Abroad in 1976

<u>R D&E Abroad for:</u>	<u>As % of 1976 Total R D&E Abroad</u>
A) Emission Control	85%
B) Safety	
C) Fuel Economy	
D) Alternate Power Plants	
E) Other (explain) Appearance, Styling, etc.	15%

*Interviewees found it difficult to estimate amounts for items A - D because they are interrelated and hard to disaggregate.

Source: Company interviews.

Exhibit A-15

General Motors Corporation

Location of RD&E Performed Abroad in 1977: Primary Purpose, Primary User, Time Horizon, and Nature

<u>Name & Location of R D&E Activity</u>	<u>Primary Purpose</u>	<u>Primary User(s)</u>	<u>Time Horizon and Nature of R D&E Work</u>
#1 GM Argentine	Mainly Process Adaption	National Market	Nearly all work is short-term (one year or less). All work is in support of existing business.
#2 GM Brazil	Same, but under- going transition -some new product work -alternative engine work	National Market	Same as above except for product work which is on four-year cycle.
#3 GM Mexico	Mainly Process Adaption	National Market	Nearly all work is short-term (one year or less). All work is in support of existing business.
#4 GM Venezuela	Mainly Process Adaption	National Market	Same as GM Mexico

Source: Company interviews.

Exhibit A-15 (continued)

General Motors Corporation

Location and Selected Characteristics of RD&E Performed Abroad in 1977:

<u>Name and Location of R D&E Activity</u>	<u>Primary Purpose</u>	<u>Primary User(s)</u>	<u>Time Horizon and Nature of R D&E Work</u>
#5 GM Australia General Motors - Holden Ltd. Elizabeth, S. Australia	Product Develop- ment; Process Development and Adaptation.	National Market	Product work is within 4-6 year model cycle. Process work is tactical or short-term given size of project, usually under one year.
#6 GM South Africa GM South African (PTY) Ltd. Port Elizabeth	Mainly process adaptation.	National Market	Most work is short term (one year or less).

Exhibit A-15 (continued)

General Motors Corporation

The Location and Selected Characteristics of RD&E Performed Abroad in 1977

<u>Name and Location of RD&E Activity</u>	<u>Primary Purpose</u>	<u>Primary User</u>	<u>Time Horizon and Nature of RD&E Work</u>
#7 GM France	Mainly Process Adaption	National market	Most work is short-term (one year or less).
#8 GM Germany Adam Opel A.G. Russelsheim West Germany	Product Development Process Development and Adaption	National market	Majority of product work within four year model cycle and totally in support of existing business.
#9 GM United Kingdom Vauxhall Motors, Ltd. Luton, Bedfordshire England	Product Development Process Development and Adaption	National market	Same as above (GM Germany)

Source: Company interivews.

Exhibit A-15 (continued)

General Motors Corporation

The Location and Selected Characteristics of R D&E Performed Abroad in 1977

<u>Name and Location of R D&E Activity</u>	<u>Primary Purpose</u>	<u>Primary User(s)</u>	<u>Time Horizon and Nature of R D&E work</u>
#10 GM United Kingdom General Motors Limited	Mainly product (components) and process adaptation	National Market	Nearly all tactical, short-term work under one year in support of existing business.
#11 GM United Kingdom A.C. Delco Ltd.	Same as above.	National Market	Same as above.

Source: Company interviews.

Exhibit A-16

General Motors Corporation

The Location of RD&E Performed Abroad in 1977: Form of and Reason for Establishment

<u>Name and Location of R D&E Activity</u>	<u>R D&E Activity Created or Acquired</u>	<u>R D&E Activity Associated with Manufacturing</u>	<u>Why R D&E Activity Started and/or Maintained</u>
#1 GM Argentina	Created	Yes	Process adaption required with assembly work. Expanded with start of manufacturing Product adaption started with component mfg.
#2 GM Brazil	Created	Yes	- same as above -
#3 GM Mexico	Created	Yes	- same as above -
#4 GM Venezuela	Created	Yes	- same as above -

Source: Company interviews.

Exhibit A-16 (continued)
General Motors Corporation

The Location and Selected Characteristics of R D&E Performed Abroad in 1977

<u>Name and Location of R D&E Activity</u>	<u>R D&E Activity Created or Acquired</u>	<u>R D&E Activity Associated with Manufacturing</u>	<u>Why R D&E Activity Started and/or Maintained</u>
# 5 GM Australia	Acquired	Yes	Activities maintained and expanded to develop new products for Australian and Far East markets.
# 6 GM South Africa	Created	Yes	Process adaptation required with assembly work. Expanded with start of manufacturing. Product adaptation started with component manufacturing.

Source: Company interviews.

Exhibit A-16 (continued)

General Motors Corporation

The Location and Selected Characteristics of R D&E Performed Abroad in 1977

<u>Name and Location of R D&E Activity</u>	<u>R D&E Activity Created or Acquired</u>	<u>R D&E Activity Associated with Manufacturing</u>	<u>Why R D&E Activity Started and/or Maintained</u>
#7 GM France	Created	Yes	Process adaptation required with start-up of assembly and manufacturing work.
#8 GM Germany Adam Opel	Acquired	Yes	Activities maintained and expanded to develop new and improved products for German market.
#9 GM United Kingdom Vauxhall	Acquired	Yes	Activities maintained and expanded to develop new and improved products for U.K. market.

Source: Company interviews.

Exhibit 16 (concluded)

General Motors Corporation

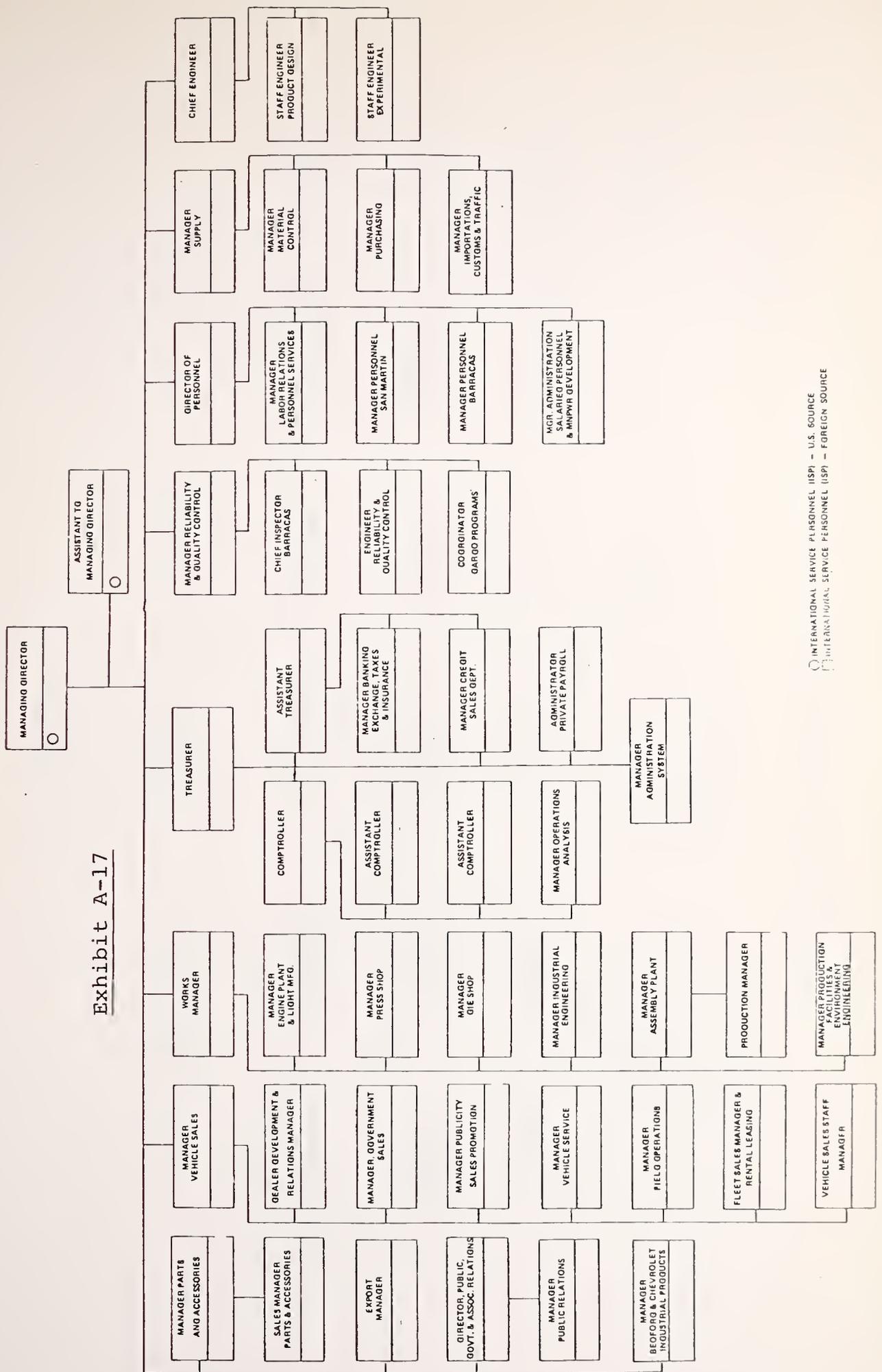
The Location and Selected Characteristics of R D&E Performed Abroad in 1977

<u>Name and Location of R D&E Activity</u>	<u>R D&E Activity Created or Acquired</u>	<u>R D&E Activity Associated with Manufacturing</u>	<u>Why R D&E Activity Started and/or Maintained</u>
#10 GM United Kingdom GM Limited	Created	Yes	Process adaptation required with start of components manufacturing.
#11 GM United Kingdom A.C. Delco	Acquired	Yes	- same as above -

Sources: Company interviews.

GENERAL MOTORS ARGENTINA S. A.

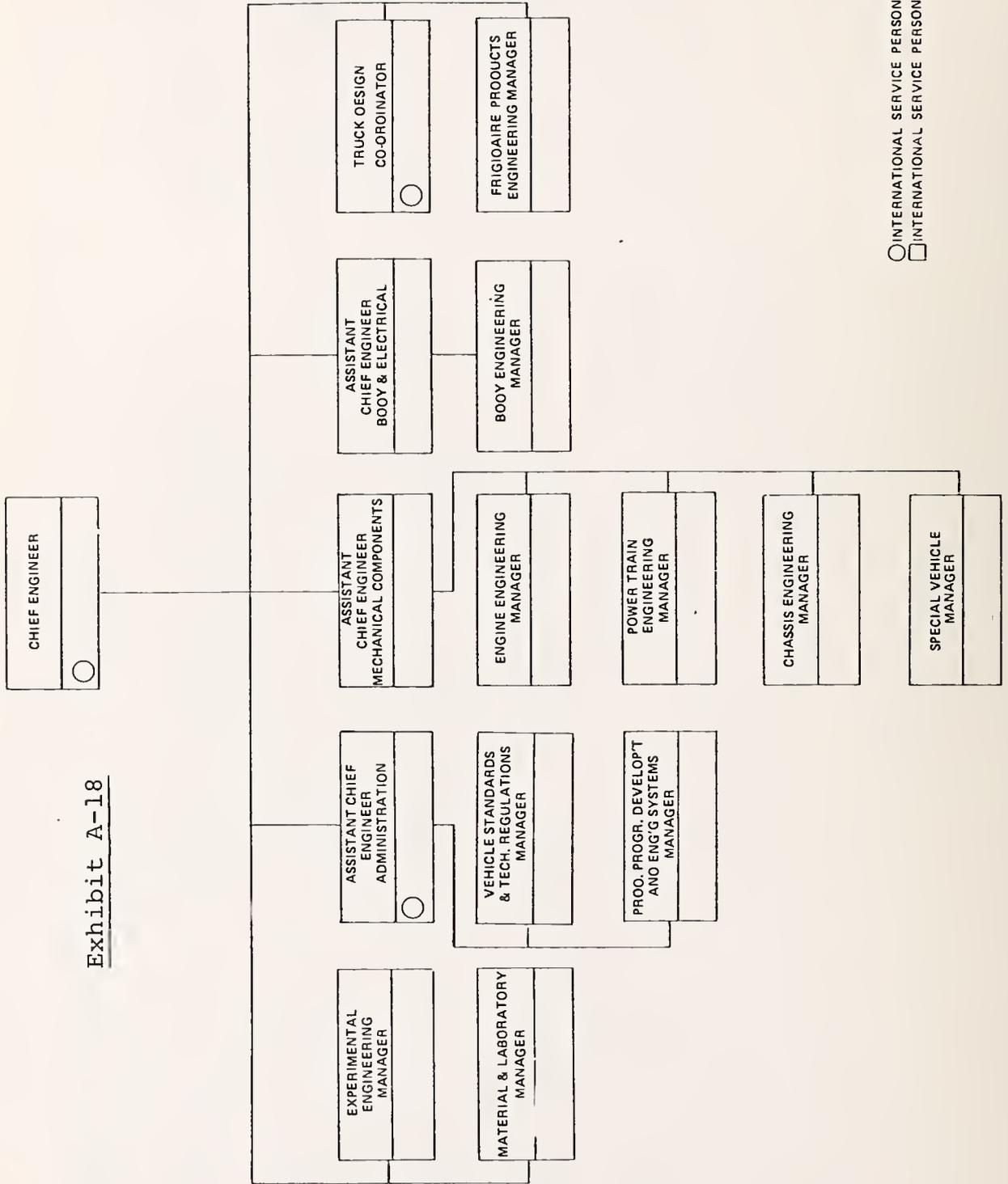
Exhibit A-17



○ INTERNATIONAL SERVICE PERSONNEL (ISPI) — U.S. SOURCE
 □ INTERNATIONAL SERVICE PERSONNEL (ISPI) — FOREIGN SOURCE

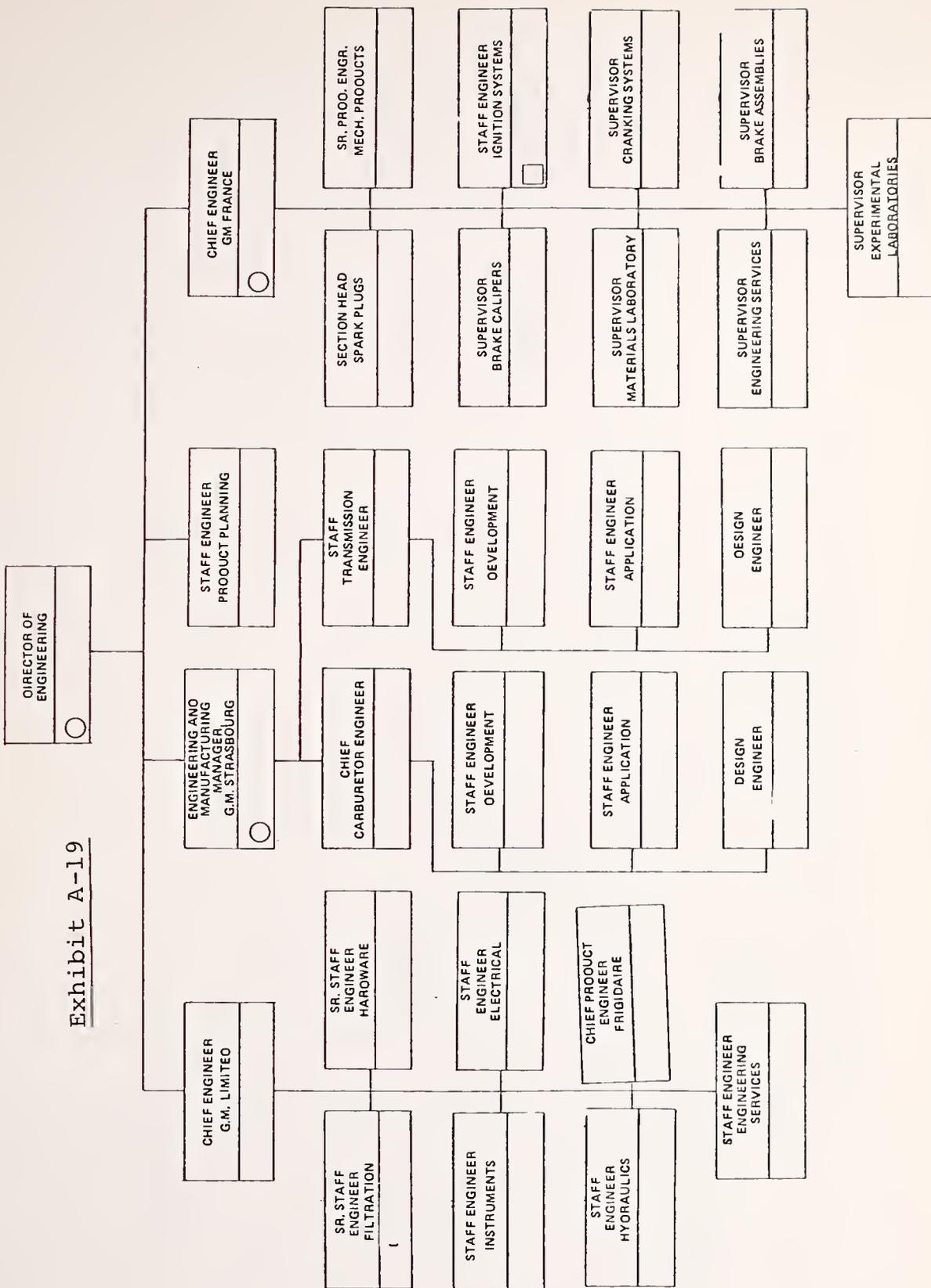
GENERAL MOTORS DO BRASIL S. A.

Exhibit A-18



○ INTERNATIONAL SERVICE PERSONNEL (ISP) — U.S. SOURCE
 □ INTERNATIONAL SERVICE PERSONNEL (ISP) — FOREIGN SOURCE

AUTOMOTIVE COMPONENTS - EUROPE ENGINEERING

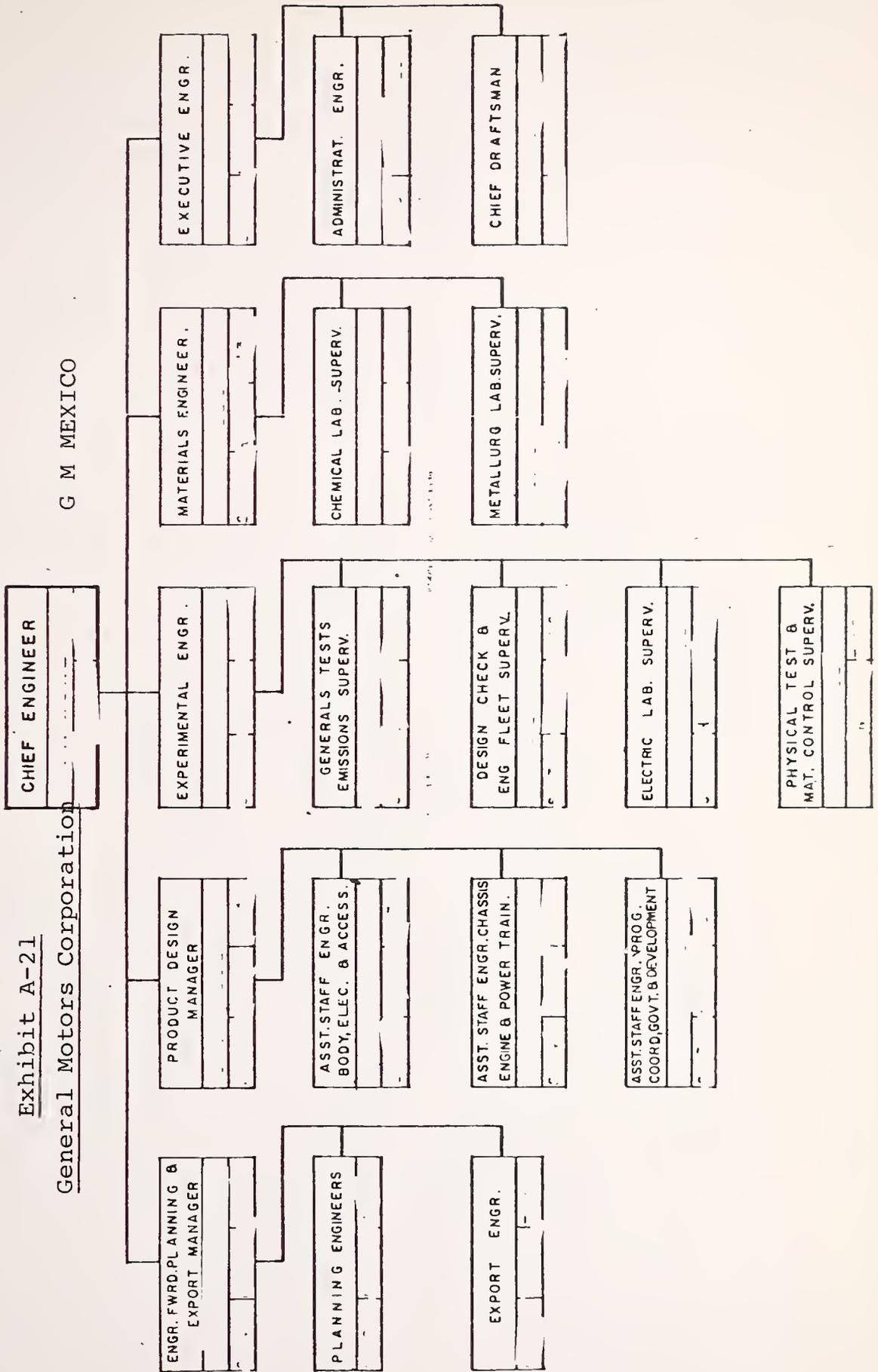


○ INTERNATIONAL SERVICE PERSONNEL (ISP) - U.S. SOURCE
 □ INTERNATIONAL SERVICE PERSONNEL (ISP) - FOREIGN SOURCE

Exhibit A-21

General Motors Corporation

G M MEXICO



ADAM OPEL A.G.

Exhibit A-22

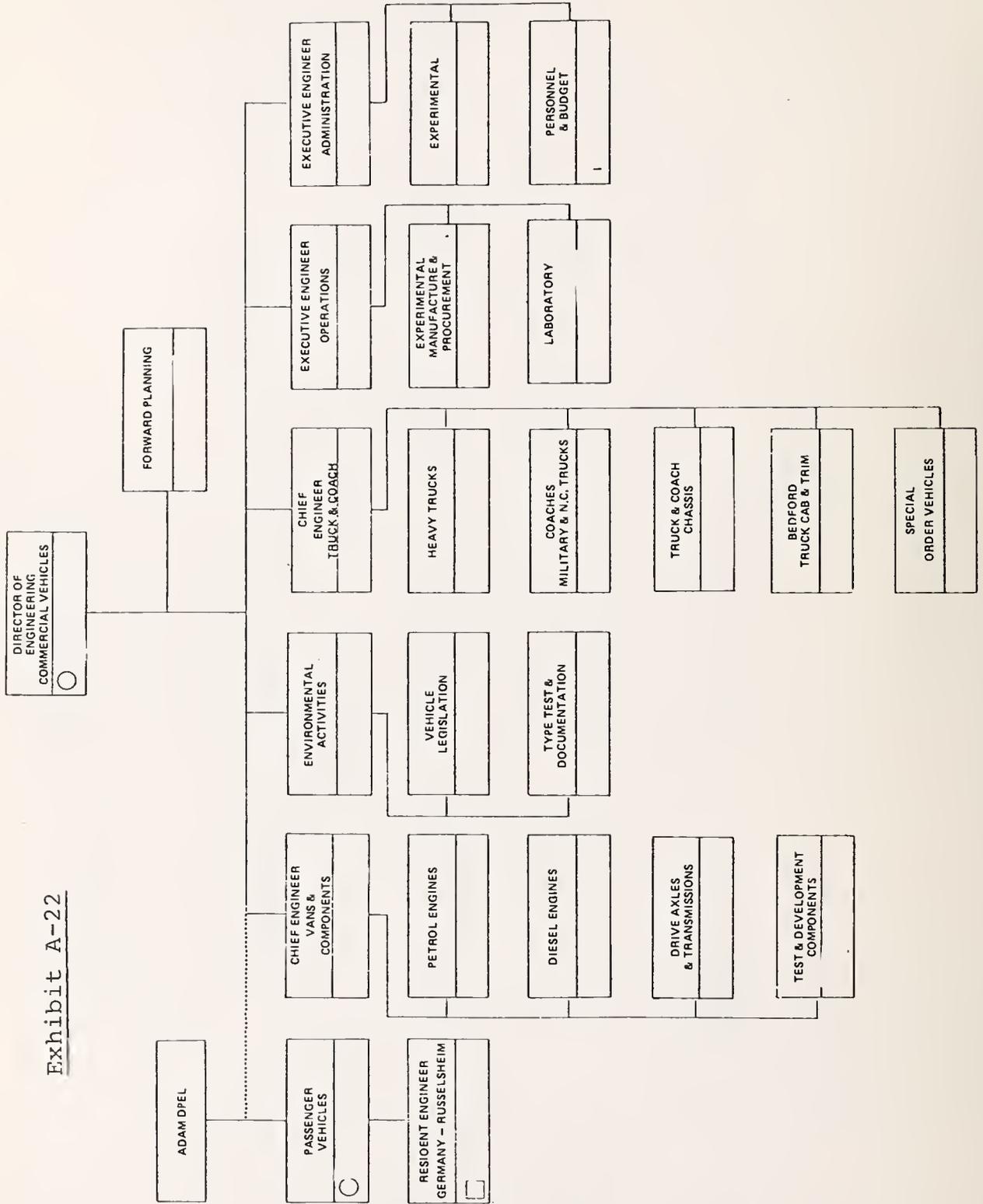
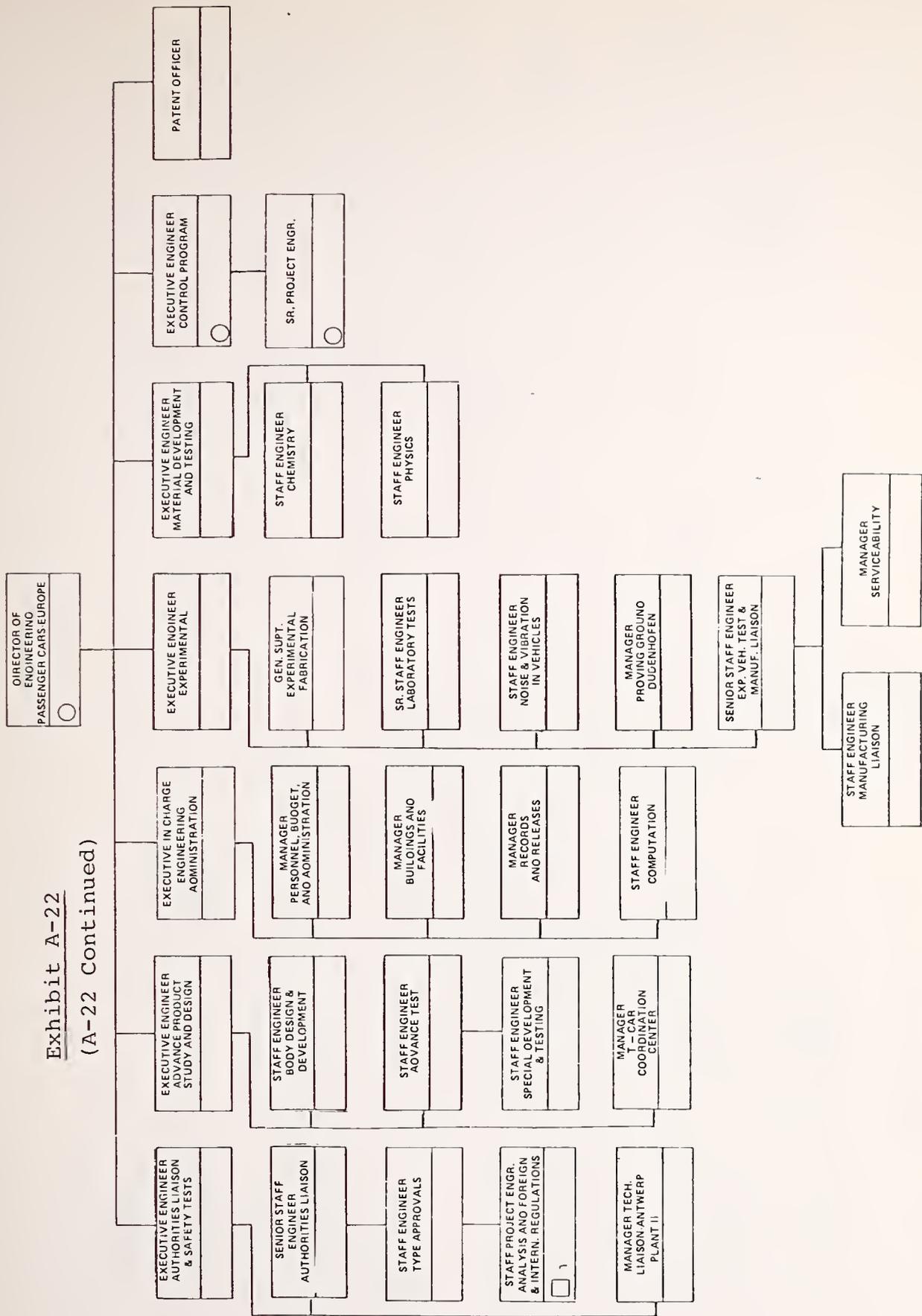
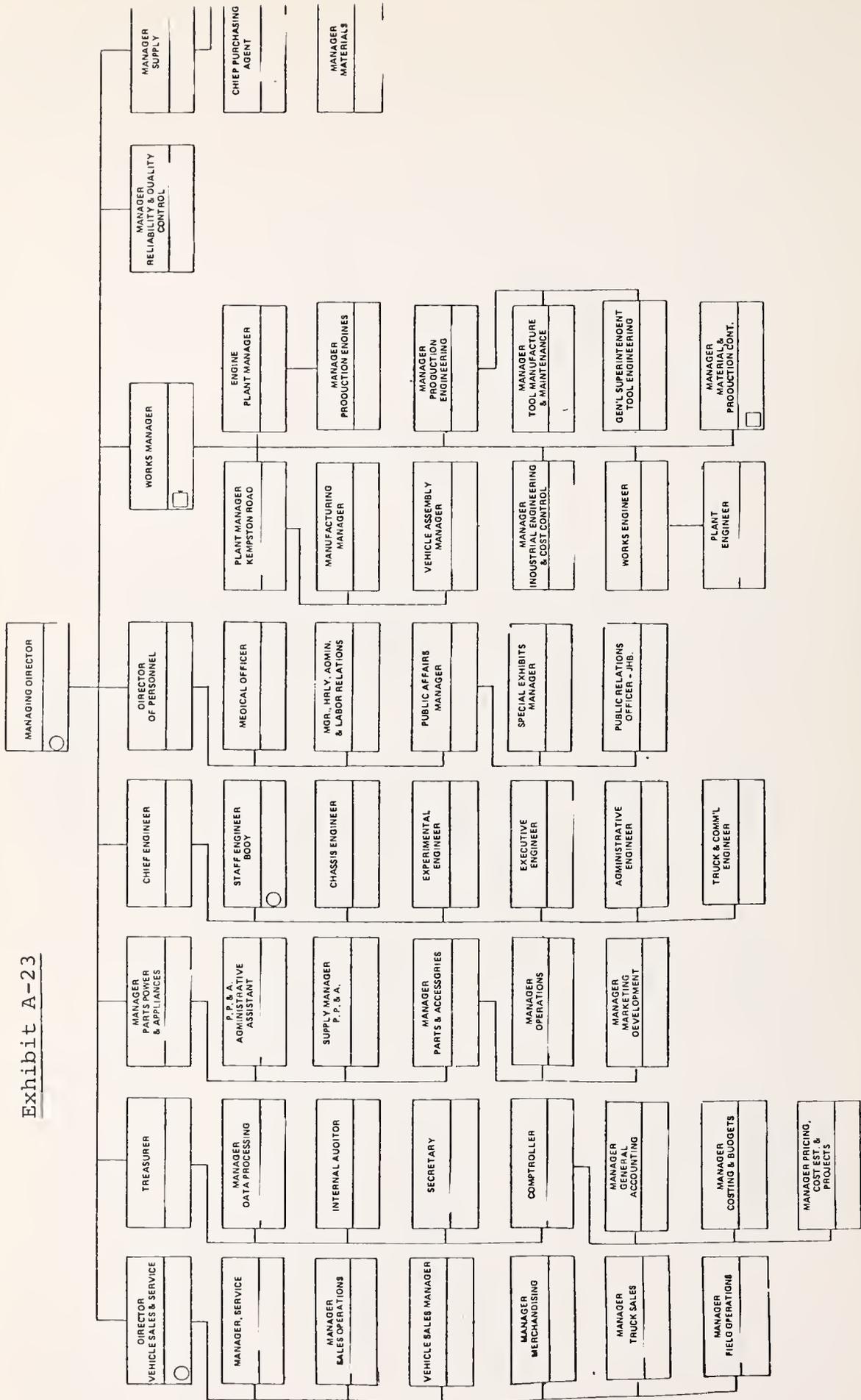


Exhibit A-22
(A-22 Continued)



GENERAL MOTORS SOUTH AFRICAN (PTY.) LIMITED

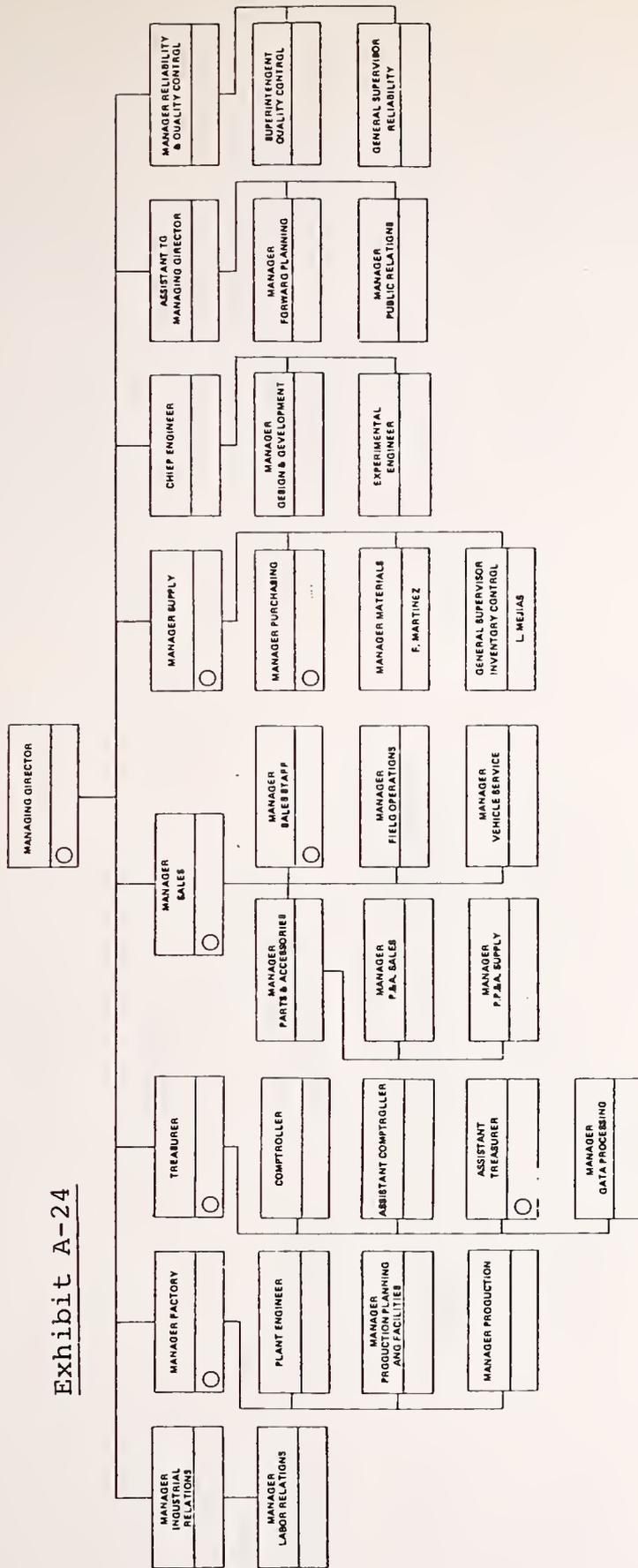
Exhibit A-23



○ INTERNATIONAL SERVICE PERSONNEL (ISP) — U.S. SOURCE
 □ INTERNATIONAL SERVICE PERSONNEL (ISP) — FOREIGN SOURCE

GENERAL MOTORS DE VENEZUELA . S.A.

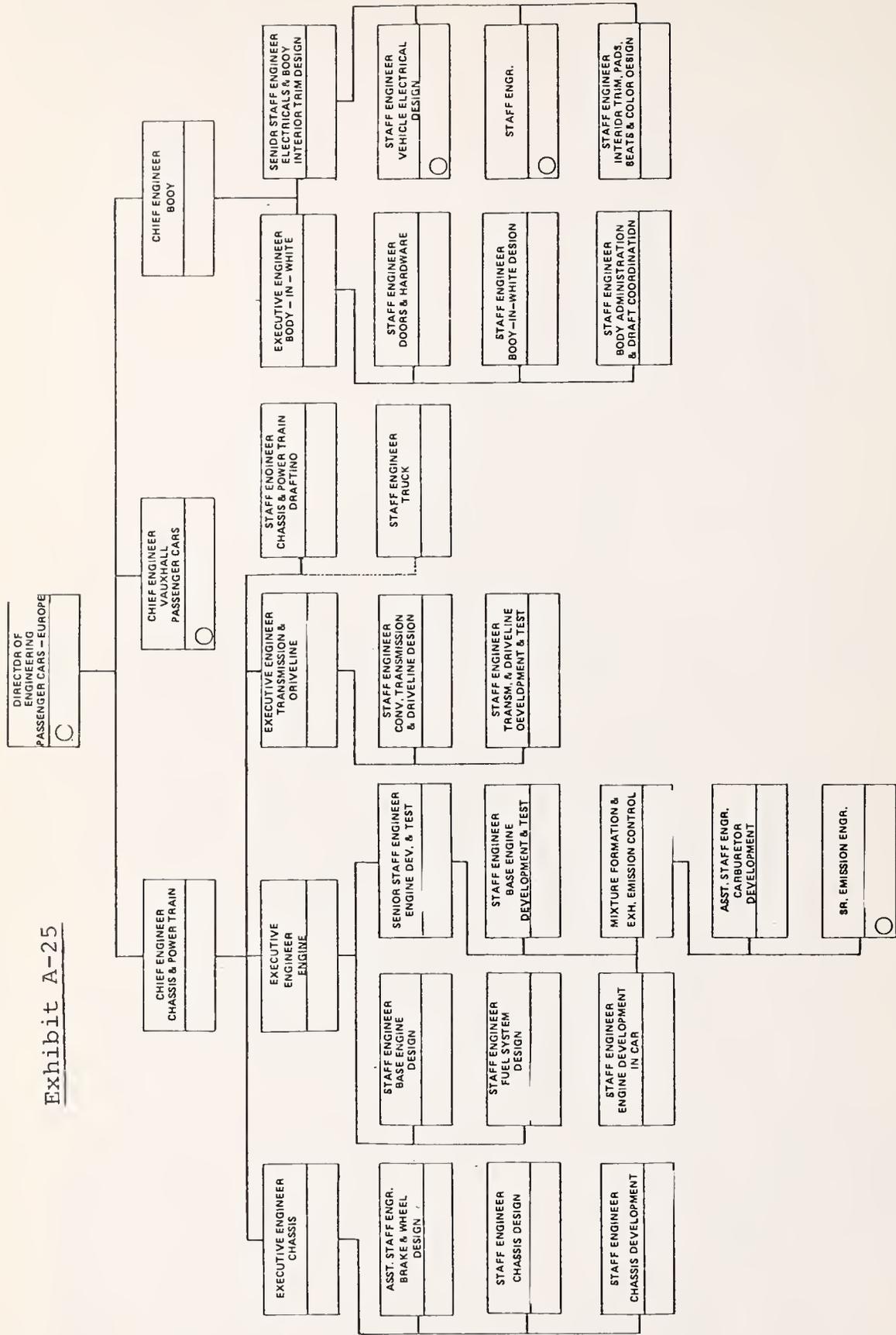
Exhibit A-24



INTERNATIONAL SERVICE PERSONNEL (ISP) - U.S. SOURCE
 INTERNATIONAL SERVICE PERSONNEL (ISP) - FOREIGN SOURCE

VAUXHALL MOTORS LIMITED

Exhibit A-25



1.2 PRODUCTION ABROAD

By 1977, General Motors had 41 production facilities located in twenty countries for passenger vehicles that were wholly or majority-owned outside the United States. Data are provided in Exhibit B-1 which identify the location, name, and principal purpose of production operations established abroad by General Motors by the end of 1977.

In addition, minority-owned production activities are also conducted in Iran, Kenya, and Japan (Isuzu).

Exhibit B-2 attempts to place these numerous production operations in perspective. It shows that the vast majority of GM's production abroad for passenger vehicles is located in four countries. And the German subsidiary Adam Opel A.G. alone is larger than the others combined.

Exhibit B-1

General Motors Corporation
Location and Purpose of Production
Operations Abroad

Name and Location of
Production Activities

Purpose

Argentina

GM Argentina S.A.

1. Buenos Aires
2. San Martin

Assembly
Manufacturing

Australia

GM - Holden's Lmt.

3. Adelaide
4. Brisbane
5. Dandenong
6. Elizabeth
7. Melbourne
8. Perth
9. Sydney

Manufacturing
Assembly
Manufacturing
Manufacturing
Manufacturing
Assembly
Assembly

Belgium

GM Continental

10. Antwerp

Assembly (2 plants)

Brazil

GM do Brasil S.A.

11. Sao Paulo
12. San Jose

Manufacturing
Assembly

Exhibit B-1 (continued)
General Motors Corporation

<u>Name and Location of Production Activities</u>	<u>Purpose</u>
<u>Chile</u>	
GM Chile S.A.	
13. Arica	Assembly
<u>England</u>	
GM Limited	
14. Dunstable	Manufacturing
15. Liverpool	Manufacturing
16. Southampton	Manufacturing
Vauxhall Motors Limited	
19. Dunstable	Manufacturing
20. Ellesmere Port	Manufacturing
21. Luton, Bedfordshire	Manufacturing
<u>France</u>	
GM France	
22. Gennesvilliers	Manufacturing
GM Strasbourg	
23. Strasbourg	Manufacturing

Exhibit B-1 (continued)

General Motors Corporation

<u>Name and Location of Production Activities</u>	<u>Purpose</u>
<u>West Germany</u>	
Adam Opel A.G.	
24. Bochum	Manufacturing
25. Kaiserslauter	Manufacturing
26. Russelsheim au Main	Manufacturing
GM Deutschland GmbH	
27. West Berlin	Manufacturing
<u>Ireland</u>	
GM Ireland Limited	
28. Dublin	Assembly only
<u>Malaysia</u>	
GM Malaysia Sendirian	
29. Berhad	Manufacturing
<u>Mexico</u>	
GM de Mexico S.A. de C.U.	
30. Mexico D.F.	Manufacturing
31. Toluca	Manufacturing

Exhibit B-1 (continued)

General Motors Corporation

<u>Name and Location of Production Activities</u>	<u>Purpose</u>
<u>New Zealand</u>	
GM New Zealand Lmt.	
32. Wellington	Assembly only.
<u>Philippines</u>	
GM Philippines, Inc.	
33. Manila	Assembly only
GM Philippines Manufacturing Corp.	
34. Manila	Manufacturing
<u>Portugal</u>	
GM de Portugal, Limitada	
35. Azambuja	Assembly only
<u>South Africa</u>	
GM South African Pty. Ltd.	
36. Port Elizabeth	Manufacturing

Exhibit B-1 (continued)

General Motors Corporation

<u>Name and Location of Production Activities</u>	<u>Purpose</u>
<u>Switzerland</u>	
GM Suisse S.A.	
37. Bienne	Assembly only
<u>Thailand</u>	
Bangchan General Assembly Co., Ltd. (60% GM)	
38. Bangkok	Assembly only
<u>Uruguay</u>	
GM Uruguay S.A.	
39. Montevideo	Assembly only
<u>Venezuela</u>	
GM de Venezuela, C.A.	
40. Caracas	Manufacturing
<u>Zaire</u>	
GM Zaire S.A.R.L.	
41. Kinshasa	Assembly only

Exhibit B-2

General Motors Corporation

National Locations and Output of Principal Production

Operations Abroad of Passenger Cars

1972-1976

Country	Passenger Cars Produced and Assembled	Output	
		Year	000s units
1) Australia GM-Holden	Gemini	1976	130
	Holden	1975	138
	Torana	1974	185
	Statesman	1973	200
		1972	189
2) Brazil GM do Brasil	Opala	1976	181
	Comodoro	1975	173
	Chevette	1974	181
		1973	143
		1972	102
3) England Vauxhall	Chevette	1976	198
	Viva	1975	201
	Magnum	1974	250
	Vauxhall VX	1973	259
4) Germany Adam Opel	Kadett	1976	922
	Manta	1975	686
	Ascona	1974	592
	Rekord	1973	845
	Commodore	1972	904
	Diplomat		
<u>All Other Sources</u>		1976	204
		1975	178
	Includes units manufactured by Isuzu for G.M.	1974	162
		1973	145
		1972	123

1.3 SALES AND MARKETING ABROAD

General Motors sells its passenger cars in most of the world's nations. However, these sales occur through a system of independent dealerships in many countries which import the final product from GM subsidiaries in other countries.

Sales attributable to operations outside the United States and Canada were nearly \$7.5 billion in 1976 and represented an estimated 12% of GM's total net income. (see Exhibit C-1).

Exhibit C-2 shows a geographic breakdown of sales abroad.

By 1977, General Motors had marketing and/or sales operations for passenger vehicles in 28 countries besides the United States and Canada. The data provided in Exhibit C-3 identify the location of these national sales operations established abroad by General Motors by the end of 1977.

No data were available about the physical size of sales and marketing activities alone. However, Exhibit C-4 presents data for the physical space occupied by both administrative and sales offices for 1976. The percentage of foreign space for administration and sales of total space (at 20%) is equal to the percentage of foreign-to-total sales.

Exhibit C-1
General Motors Corporation
Net Sales and Income Attributable to
Operations Outside of the United States
and Canada

	<u>Net Sales Abroad*</u> <u>\$ millions</u>	<u>Estimated Net</u> <u>Income Abroad</u> <u>% of Total Net Income</u>
1976	7,495	12%
1975	7,227	6%
1974	5,969	-
1973	5,779	9
1972	4,741	8

*Before elimination of transfer sales.

Source: GM's 1976 10K.

Exhibit C-2
General Motors Corporation
Sales Abroad by Geographic Region

	<u>In millions of \$</u>	<u>%</u>
Total Abroad*	\$7,495	100
Europe	5,023	67
Australia, New Zealand and East Asia	1,039	14
Latin America	1,326	18
Middle East and Africa	231	3

*Excludes Canada and after eliminating inter-area sales of \$124 million.

Source: GM's 1976 Form 10K.

Exhibit C-3

General Motors Corporation

Location of National Sales Headquarters Abroad

<u>Country</u>	<u>City</u>
Argentina	Buenos Aires
Australia	Melbourne
Austria	Vienna
Belgium	Antwerp
Brazil	Sao Paulo
Chile	Santiago
England	London
Finland	Helsinki
France	Paris
Germany	Russeleheim
Italy	Rome
Ireland	Dublin
Luxembourg	Luxembourg
Malaysia	Singapore
Mexico	Mexico City
New Zealand	Wellington
Norway	Oslo
Philippines	Manila
Portugal	Lisbon
Scotland	Edinburgh
South Africa	Port Elizabeth
Sweden	Stockholm
Switzerland	Geneva
Thailand	Bangkok
Uruguay	Montevideo
Venezuela	Caracas
Zaire	Kinshasa

Exhibit C-4
General Motors Corporation
Administration and Sales Offices
in 1976

	<u>In 000s of</u> <u>Square Feet</u>	<u>%</u>
Worldwide	31,687	100
U.S.	24,303	76
Canada	1,131	4
Other Foreign	6,253	20

Source: GM's 1976 Form 10K.

2. FORD MOTOR COMPANY

2.1 RESEARCH, DEVELOPMENT, AND ENGINEERING ABROAD

Ford Motor Company's total worldwide expenditures for R D&E from 1972 to 1976 are shown in Exhibit A-1 along with calculations of R D&E's relative intensity.

An estimate of the R D&E performed abroad is shown in Exhibit A-2 for both automotive and non-automotive operations.

Exhibit A-3 shows an estimate of automotive R D&E performed abroad in 1976. Exhibit A-4 calculates the relative intensity of automotive R D&E performed in the United States/Canada and abroad.

Exhibits A-5 and A-6 show estimates for research and development activities performed in the United States and abroad that excludes engineering and design activities. Exhibits A-7 through A-10 use this same definition of R&D to estimate the composition and time horizon of R&D performed abroad and in the United States (for comparative purposes).

Ford's overseas operations are organized regionally. Ford of Europe, Inc., with offices at Warley,

near London, was created in 1967; Ford Latin America, S.A. de C.V. was formed in Mexico City in 1974; Ford Asia-Pacific, Inc., headquartered in Melbourne, Australia, was founded in 1970; and Ford Mideast and Africa, Inc., was established in 1975 with headquarters in Dearborn, Michigan. However, in only one of the four overseas organizations, Ford of Europe, is research and development performed under the narrow definition. Elsewhere, R&D is insignificant either quantitatively or qualitatively.

According to one interviewee, some R&D is conducted in Latin America and in Australia; however, of the \$7 million spent abroad by Ford on R&D in 1976, less than \$100,000 was spent in Latin America and only \$300,000-\$400,000 in Australia. Research and development in Latin America concerns primarily the determination of what components (e.g. emission control features) can be taken off before marketing the vehicle in the particular target country in question. The same is essentially true in Australia; R&D is not conducted independently, but rather is done within established engineering groups. No research and development is conducted by Ford Mideast and Africa, Inc. which is primarily engaged in developing new manufacturing locations in the area.

On the other hand, Ford's R&D efforts in Europe are important, the quality of which is reflected in Exhibits A-11 and A-12.

The subdivision of R&D facilities in the Ford organization is based on mission. Thus, three distinct facilities are located in England and Germany supporting car production, truck production, and manufacturing.

All three R&D facilities were established abroad during the mid-1960's to perform R&D activities expressly for the European market. This essentially remains their function today, although to a limited extent new products and processes are being developed by these facilities for simultaneous application in the North American market.

Within the Ford organization, a Product Development Group of Europe exists which includes all of the car product engineering personnel of Europe (line as well as staff), product planning as well as design. Each of these activities is headed by a Ford of Europe Vice President who reports to the Vice President of Product Development, who is also a Vice President of the parent company. These line activities are supported by a controller's office and a personnel office. Working on the component system basis, the operation is divided between the twin Design and Engineering Centers at Dunton, Essex in England (near London), and at Cologne in Germany, plus a 630 acre proving ground near Lommel. A highly developed communication network links all activities and there are sufficient facilities to engineer cars for any territory in the world.¹

Within these facilities in 1976, there was a total of approximately 3000 staff and about 1600 hourly paid employees.

¹Public Affairs Staff, Ford Motor Company, Brentwood, Essex, Great Britain, Ford Product Development in Europe, 1976, p. 3.

All of these personnel were not involved on a day-to-day basis with research and development as narrowly defined. If production and product engineering, product testing and related technical activities are excluded, then only approximately 10 per cent of those line and staff personnel cited above, were engaged strictly in R&D work. The following approximations are instructive:

R & D Employment¹ in 1976

Total number of R&D workers-----	1608
Number of R&D workers in U.S./Canada-----	1440
Number of R&D workers abroad-----	168
R&D workers for passenger cars in U.S.---	1410
R&D workers for passenger cars abroad----	165

Ford's Research and Engineering Center at Dunton, Essex was opened on October 12, 1968. Activities at Dunton² include advanced research in the fundamentals of fuels, lubricants and combustion, in physics and chemistry of materials and in the design of advanced components and structures.³

¹derived from personal interviews at Ford Motor Company. See Exhibits A-13-15 for summary of R&D and RD&E employment abroad.

²Since the research and engineering centers at Dunton and Cologne are twin facilities, a detailed description of the latter is not deemed necessary.

³Press Office, Ford Motor Company, Limited, Brentwood, Great Britain, News Release, October 11, 1968.

In addition to housing facilities for styling cars and commercial vehicles, engine and transmission design, and body and electrical design engineering, the Center also contains laboratories in which wood, plastic and metal models or components are designed and performance-tested.¹

Included in the Center's 357,000 square foot floor area are:

1) a design building housing 165 design and product planning staff, with interior and exterior advanced studios, showroom and fabrication workshops, and a spacious open-air viewing court - large enough to contain simulated roads and street backgrounds -- for visual assessment of future products.

2) main workshops, where laboratory facilities subject engines, bodies, suspensions, steering systems, brakes and interior trim materials to life-time durability and performance evaluations.

3) test fleet workshops, where up to 300 prototype cars and trucks are tested before release to production areas.²

¹Press Office, Ford Motor Company Limited, Brentwood, Great Britain, News Release, October 11, 1968.

²Ibid.

As of December, 1976, a variety of important research projects were under way at Ford's Dunton facility, including on-board computer control of the entire combustion process, investigations into structural plastic materials, electronic instrument display modules, and, for particular application to pressures in Europe (where gasoline is still over three times its price in the U.S. in "real" terms), lightweight body structures and improved aerodynamics to conserve fuel. Since advanced suspension systems have also been high on the list of European market requirements, work in this field has been similarly active.¹

Although Ford's R&D managers abroad at Dunton and elsewhere do enjoy considerable decision-making autonomy, they are not totally free to determine R&D assignments or to allocate R&D resources as they see fit. There is direction from Dearborn and this is particularly true of important projects. European R&D managers do have, of course, considerable latitude in operating within Dearborn directives; they may revise program specifics or modify program objectives after work has begun.²

¹Public Affairs Staff, Ford Motor Company, Brentwood, Essex, Great Britain, Op. Cit., p. 4

²derived from personal interviews at Ford Motor Company.

In some R&D projects, a strong interchange exists between domestic R&D personnel and overseas R&D personnel; however, in other project areas, there is no interchange or very little. This interchange takes place in a variety of ways including telephone conferences, the movement of personnel back and forth on a regular basis, the creation of special task forces and the sponsorship of technical workshops attended by both domestic and foreign R&D personnel at which technical papers are read and discussed.

Also, Ford has a well-organized technical information exchange (between U.S. operations and overseas operations) to assure that everyone who should know, does know what's going on. The company annually updates their R&D want list -- the current list includes about 300 line items. Each line identifies an area/item of need including specific objectives/targets sought. Ideas and proposals for R&D projects are invited, and decisions are made in the U.S. on which projects are funded. The company also compiles a manual of all internal R&D projects (worldwide) to facilitate information exchange about who's doing what. The manual includes names and addresses of all project leaders. Technical exchange workshops (on various topics) are held four to six times per year. The R&D want lists and R&D project manuals are confidential documents.

Exhibit A-1

FORD MOTOR COMPANY

Estimated RD&E Expenditures as Percentage of
Sales and Income before Income Taxes
1972-1976¹

<u>Year</u>	<u>R D&E</u> <u>(millions of \$)</u>	<u>RD&E As</u> <u>% of Sales</u>	<u>R D&E As</u> <u>% of Income</u> <u>(Before Taxes)</u>	<u>R D&E As</u> <u>% of Net</u> <u>Income</u>
1976	\$ 925	3.2%	53%	94%
1975	748	3.1	188	232
1974	825	3.5	149	252
1973	826	3.6	51	91
1972	621	3.1	37	71

¹automotive and non-automotive

Source: Ford Motor Company's Annual Report, private interviews with company officials, and consultant's calculations.

Exhibit A-2
Ford Motor Company
Estimated RD&E Performed in the
United States/Canada and Abroad in 1976

	<u>Total</u>	<u>U.S./Canada</u>	<u>Abroad</u>
Millions \$	925	722	203
%	100	78	22

*Automotive and non-automotive expenditures including engineering and design.

Source: Form 10K for 1976 plus interviews and consultants' estimate.

Exhibit A-3
Ford Motor Company

Automotive Sales Income before Income Taxes and
Estimated RD&E Expenditures in 1976

Automotive	(in millions of \$)		Other Abroad
	Worldwide Total	U.S./Canada	
Sales	26,499	18,555	7,944
Income Before Income Taxes	1,472	767	705
R D&E	906	707	199

Source: Ford Motor Company's Annual Report, for automotive sales and income figures. Automotive R D&E figures are from private interviews with company officials and consultant's calculations.

Exhibit A-4

Ford Motor Company

Estimated Automotive RD&E Expenditures as
Percentage of Sales and Income before Income Taxes

R D&E As a Percent of Sales

	<u>Total</u>	<u>U.S./Canada</u>	<u>Other/Abroad</u>
% R D&E	3.4	3.8	2.5

R D&E As a Percent of Income Before Income Taxes

	<u>Total</u>	<u>U.S./Canada</u>	<u>Other/Abroad</u>
% R D&E	62%	92%	28%

Source: Consultant's calculations.

Exhibit A-5
Ford Motor Company

R&D Expenditures in United States/Canada and Abroad as
Percentages of Total R&D Expenditures, 1976
(excludes engineering activities)

	<u>Expenditures</u> <u>(millions of \$)</u>	<u>Percentage</u>
Total R&D Expenditures (narrowly defined)	91	100
R&D Expenditures in the U.S./Canada	84	92.3
R&D Expenditures Abroad	7	7.7

Note: Includes non-automotive

Source: Private interviews with company officials
and consultant's calculations.

Exhibit A-6

Ford Motor Company

Estimated R&D Expenditures for Passenger Cars in
United States/Canada and Abroad as Percentage of Total R&D
Expenditures for Passenger Cars, 1976
(excludes engineering)

	<u>Expenditures</u> <u>(millions of \$)</u>	<u>Percentage</u>
Total R&D Expenditures (narrowly defined)	89.2	100
R&D Expenditures in the U.S./Canada	82.3	92.3
R&D Expenditures Abroad	6.9	7.7

Source: Private interviews with company officials
and consultant's calculations.

Exhibit A-7

Ford Motor Company

Estimated Composition of R&D Expenditure with Potential
Relevance for Passenger Cars, Performed Abroad, in 1976

(Excludes Engineering Activities)

	<u>Expenditures</u> <u>(millions of \$)</u>	<u>Percentages</u>
R&D Performed Abroad	6.9	100
R&D In Support of Existing Business	6.9	100
R&D to Develop New High-Risk Business	0	0

Note: R&D in support of existing business is defined as any work related to the conventional internal combustion engine and/or work in areas where the organization has direct technology, production, and marketing experience.

R&D to develop new high-risk business is defined as any work related to alternative engines or power sources or work in areas where the organization does not have direct technology, production, and marketing experience.

Source: Private interviews with company officials.

Exhibit A-8

Ford Motor Company

Composition of R&D Expenditures with Potential Relevance
for Passenger Cars Performed in United States/Canada, 1976

(excludes engineering activities)

	<u>Expenditures (millions of \$)</u>	<u>Percentage</u>
R&D Performed in U.S./Canada	82.3	100
R&D in Support of Existing Business	70.3	85
R&D to Develop New High- Risk Business	12	15

Source: Private interviews with company officials.

Exhibit A-9

Ford Motor Company

Estimated Time Horizon or Period of Expected Commercializa-
tion of R&D in Support of Existing Business with Potential
Relevance for Passenger Cars, Performed Abroad in 1976

(excludes engineering activities)

<u>Expected Commercialization:</u>	<u>%</u>
Within three years -----	15
Between three and six years -----	85
Beyond six years -----	0

Source: Private interviews with company officials.

Exhibit A-10

Ford Motor Company

Estimated Time Horizon or Period of Expected Commercializa-
tion of R&D in Support of Existing Business with Potential
Relevance for Passenger Cars, Performed in United States/
Canada in 1976

(excludes engineering activities)

<u>Expected Commercialization:</u>	<u>%</u>
Within three years -----	17.0
Between three and six years -----	62.5
Beyond six years -----	20.5

Source: Consultant's calculations based on
company interview data.

Exhibit A-11

Ford Motor Company

Location of R&D Performed Abroad in 1977: Form and Reason of Establishment

Name and Location of R&D Unit	Period Created or Acquired	Role of Govt. Incentives in Creation of Unit	Organizational Location	Person to Whom R&D Director Reports
1) European R&D facility in support of car production located at Dunton, Essex in England (near London) and at Merkench in Germany (near Cologne)	created in the mid-1960s	none	Located near manufacturing and engineering sites	Director, located in Cologne, reports to engineering V.P.
2) European R&D facility in support of truck production located in Dunton, England	same as above	none	same as above	No director in truck facility.
3) European R&D facility in support of manufacturing located in Dunton, England and in Merkenich, Germany	same as above	none	same as above	Director is manufacturing coordinator at staff level, reports to V.P. in charge of manufacturing.

Source: Personal interviews, Ford Motor Company and Public Affairs Staff, Ford Motor Company, Brentwood, Essex, Great Britain, Ford Product Development in Europe, 1976

Exhibit A-12

Ford Motor Company

Location of R&D Performed Abroad in 1977: Primary Purpose, Primary Type, User, & Nature of R&D

Name and Location of R&D Unit	Purpose of Unit	Type of Unit	User of Unit	Nature of R&D
1) European R&D facility in support of car production located in Dunton, England and in Merkenich, Germany	created to support European car production	functions primarily as an indigenous technology unit	approximately 95% of R&D output is used by Ford of Europe; 5% by Ford of North America	all work is in support of existing business
2) European R&D facility in support of truck production located in Dunton, England	created to support European truck production	same as above	same as above	same as above
3) European R&D facility in support of manufacturing located in Dunton, England and in Merkenich, Germany	created to promote manufacturing efficiency in Europe	same as above	same as above	same as above

Source: Personal interviews, Ford Motor Company and Public Affairs Staff; Ford Motor Company, Brentwood, Essex, Great Britain, Ford Product Development in Europe, 1976.

Exhibit A-13
Ford Motor Company
Estimated R&D Employment,¹ 1976
(excludes engineering)

	<u>Number of Workers</u>	<u>Percentage</u>
Total	1608	100
North American Operations	1440	89.5
Abroad	168	10.5

¹includes staff and hourly paid employees.

Source: Personal interviews with the company.

Exhibit A-14

Ford Motor Company

Estimated RD&E Employment,¹ 1976

	<u>Number of Workers</u>	<u>Percentage</u>
Total	13,600	100
North American Operations	9,000	66.2
Abroad	4,600	33.8

¹includes staff and hourly paid employees.

Source: Personal interviews with the company and consultant's calculations.

Exhibit A-15
Ford Motor Company
RD&E Employment -- Staff and Hourly Paid Workers, 1976

	<u>Staff</u>	Hourly Paid <u>Employees</u>	<u>Total</u>
Total	8900*	4700	13,600
North American Operations	5900	3100	9,000
Abroad	3000	1600	4,600

*Form 10K, 1976

Source: Personal interviews with the company
and consultant's calculations.

2.2 PRODUCTION ABROAD

Ford maintains four overseas regional operations in Europe, Latin America and Asia-Pacific and the Mideast and Africa. Active manufacturing and assembly operations exist in all four regions. Exhibit B-1 summarizes production operations for each region.

Ford in Europe dates back exactly 70 years; the first overseas branch of the company was opened in France in 1908. The first national company and assembly outside North America was established in Britain in 1911. By 1976, 15 Ford national companies were operating in Western Europe, employing more than 145,000 people in automotive and tractor operations. Of these, eight national subsidiaries had 23 manufacturing and assembling locations throughout the region.

The first Ford branch in Latin America was opened in Argentina in 1913. By 1976, six national companies, with more than 40,000 employees, conducted Ford automotive and tractor operations at 15 manufacturing and assembly locations in Latin America and in South Africa, which is included in Ford's Latin America region.

Ford's operations in the Asia-Pacific regions were established in 1909 with the opening of a branch in Australia. By 1976, seven Ford companies engaged in automotive and tractor operations at 11 manufacturing and assembly locations in the Asia-Pacific region, employing more than 19,000 people.

Exhibit B-2 indicates specific locations of manufacturing and assembly facilities for all overseas regions, and Exhibit B-3 identifies dealer assembly locations.

Ford's overseas facilities not shown in the tables above include a reconditioning plant in Ballarat, Australia and manufacturing plants of Richier, S.A. in France located at Charleville, Courbevoie, L'Horme, Lyon, Pont de Claix, Sedan and Villerbonne. Ford has owned Richier since 1972. Also, in Japan, a major manufacturing company, Japanese Automotive Transmission Company, is a 50 per cent owned subsidiary of Ford with extensive operations throughout the country.

Production data for key countries in Ford's overseas operations are presented in Exhibit B-4. The company's production activities abroad are further reflected in Exhibits B-5 and B-6 which summarize factory unit sales of cars from consolidated subsidiaries overseas. As in the case of R&D activities, examined in the previous section, Ford's automotive production abroad is highly concentrated in two countries, West Germany and Great Britain.

Exhibit B-1

Ford Motor Company

Production Locations Abroad by Major Geographical
Region in 1977

	<u>Europe</u>	<u>Latin America</u>	<u>Asia- Pacific</u>	<u>Mideast & Africa</u>	<u>Total</u>
Number of Nations with Production Facilities	8	6	7	2	23
Number of Production Locations*	23	15	11	2	51

*some locations have more than one plant.

Source: Ford Motor Company, International
Automotive Operations

Exhibit B-2

Ford Motor Company

Location of Overseas Manufacturing
and Assembly Facilities

<u>Country</u>	<u>City, Town or Province</u>	<u>Manufacturing Plant</u>	<u>Assembly Plant</u>
Argentina	Cordoba	x	
	Pachico	x	x
	Santa Fe	x	
Australia	Brisbane		x
	Broadmeadows	x	x
	Geelong	x	
	Ingleburn		x
	Sydney		x
Belgium	Antwerp	x	x
	Genk ¹	x	x
Brazil	Recife (Gaboatao)		x
	Sao Paulo	x	x
	Taubate	x	
Britain	Basildon	x	
	Croydon	x	
	Dagenham	x	x
	Enfield	x	
	Halewood	x	x
	Langley	x	x
	Leamington	x	
	Southampton	x	x
	Swansea	x	
	Thames	x	
	Treforest	x	
	Woolwich	x	
	Egypt	Alexandria		x
France	Bordeaux	x	
Ireland	Belfast	x	
	Cork		x
Japan	Yokahama		x
Malaysia	Singapore		x
Mexico	Mexico City	x	x
Netherlands	Amsterdam		x
New Zealand	Lower Hutt		x
	Wore	x	x
Peru	Lima ²		x
Philippines	Manila		x
	Mariveles	x	

Exhibit B-2 (continued)
Ford Motor Company
Location of Overseas Manufacturing
and Assembly Facilities

<u>Country</u>	<u>City, Town or Province</u>	<u>Manufacturing Plant</u>	<u>Assembly Plant</u>
Portugal	Lisbon		x
South Africa	Port Elizabeth	x	x
Spain	Almusafes	x	x
Taiwan	Taipai	x	x
Uruguay	Montevideo		x
Venezuela	Valencia		x
West Germany	Cologne	x	x
	Duren	x	
	Saarlouis	x	x
	Wulfratl	x	

¹The Genk complex is located in Belgium, but is operated by Ford of Germany.

²not active.

Source: Ford Motor Company, International Automotive Operations.

Exhibit B-3
Ford Motor Company
Dealer Assembly Locations

<u>Country</u>	<u>City/Town</u>	<u>Name</u>
Costa Rica	San Jose	Anglofores, Ltda.
Indonesia	Djakarta	Indonesian Service Co.
Israel	Tel Aviv	Automotive Industries, Ltd.
Korea	Seoul	Hyundai Motor Co.
Malaysia	Selangar	Associated Motor Industries of Malaysia, Ltd.
Morocco	Casablanca	S.A.I.D.A.
Trinidad	Port of Spain	C. McEnearney and Co.
Tunisia	Tunis	Societe Tunisian d'Industrie Automobile
Turkey	Istanbul	Otosan, S.A.
West Pakistan	Karachi	Ali Automobiles

Source: Motor Vehicle Manufacturers Association.

Exhibit B-4
Ford Motor Company
Unit Car Production Abroad for Major Manufacturing
Subsidiaries

Location	1976 Products Produced	Passenger Year	Cars ooo's units
<u>Germany</u>			
Ford-Werke	Fiesta	1976	449
	Escort	1975	385
	Traunas	1974	266
	Capri	1973	426
	Counsul	1972	409
	Transit		
<u>United Kingdom</u>			
Ford Motor Co.	Capri	1976	383
	Cortina	1975	330
	Escort		
	Granada		
<u>Australia</u>			
Ford Motor Co.	Escort	1976	110
	Cortina	1975	100
	Falcon	1974	112
	Fairlane	1973	100
		1972	100
<u>Brazil (production includes trucks and buses)</u>			
Ford Brasil, S.A.	Galaxie	1976	172
	LTD	1975	170
	Maverick	1974	176
	Corcel	1973	148
		1972	119

Source: Motor Vehicle Manufacturers Association.

Exhibit B-5
Ford Motor Company
Factory Unit Sales of Automobiles from
Plants of Consolidated Subsidiaries Abroad¹
1972-1976

<u>Year</u>	<u>Germany</u> ²	<u>Great Britain</u>	<u>Brazil</u>	<u>Other</u> ³	<u>Total</u>
	(units of automobiles (000))				
1976	774	374	128	175	1451
1975	596	337	123	195	1251
1974	451	422	130	209	1212
1973	679	475	106	206	1466
1972	670	516	87	193	1466

¹excludes the U.S. and Canada.

²includes the Genk complex, located in Belgium, but operated by Ford of Germany.

³principally Australia, Mexico, Argentina, South Africa and Spain.

Source: Ford Motor Company, 10K Report.

Exhibit B-6

Ford Motor Company

Factory Unit Sales of Automobiles from Plants of
Consolidated Subsidiaries Abroad as Percentage
of Total Factory Unit Sales Abroad¹, 1972-1976

Year	<u>Factory Unit Sales</u>				Total
	<u>from Germany² as a % of Total</u>	<u>from Great Britain as a % of Total</u>	<u>from Brazil as a % of Total</u>	<u>from Other Subsid.³ as a % of Total</u>	
1976	53.3	25.8	8.8	12.1	100.0
1975	47.6	26.9	9.8	15.6	100.0
1974	37.2	34.8	10.7	17.2	100.0
1973	46.3	32.4	7.2	14.1	100.0
1972	45.7	35.2	5.9	13.2	100.0

¹excludes the U.S. and Canada.

²includes the Genk complex, located in Belgium,
but operated by Ford of Germany.

³principally Australia, Mexico, Argentina, South
Africa and Spain.

Source: Exhibit B-5.

2.3 SALES AND MARKETING ABROAD

In 1976, Ford's sales totaled \$28.8 billion. Of this, Ford earned \$26.5 billion from automotive sales worldwide and \$2.3 billion from non-automotive sales. Exhibit C-1 shows the relative contributions of the company's automotive and non-automotive operations to sales from 1972 to 1976. Also, Exhibits C-1 and C-2 compare North American and overseas automotive sales for the same five year time period.

Of automotive sales totaling \$26.5 billion in 1976, 70 per cent (\$18.5 billion) were sold in the U.S. and Canada, while 30 per cent (\$7.9 billion) were sold abroad. In 1972, 75.5 per cent and 24.5 per cent of total automotive sales were sold in North America and overseas respectively. Whereas automotive sales in the U.S. and Canada increased by 32.7 per cent from 1972 to 1976, automotive sales abroad increased by 75.1 per cent over the same five year time span.

Ford's primary foreign markets are in Europe and Latin America, as indicated by Exhibits C-3 and C-4. Of its total overseas sales of \$9 billion (\$7.9 billion in automotive and \$1.1 billion in non-automotive) in 1976, 65 per cent were gained from its European operations and approximately 20 per cent from Latin America. The remaining 15 per cent of Ford's overseas market is from the Asia-Pacific region (primarily).

The company's sales record in 1976 was mixed with reference to its two major marketing areas. In Europe, retail sales of Ford-built cars and trucks were

record breaking in 1976, reaching 1.2 million units. Automobile sales alone, up 30 per cent from 1975, totaled 1.1 million units. On the other hand, retail sales of Ford-built cars in Latin America declined by approximately 5 per cent in 1976, compared with 1975. Retail truck sales rose from 115,000 units in 1975 to 116,000 units in 1976, but automobile unit sales declined from 223,000 (1975) to 212,000 (1976).¹

Overall, 1976 was a growth year for Ford products abroad as indicated by the increase in the company's share of the world market for both cars and trucks (Exhibit C-5).

By 1977, Ford had marketing and sales operations in twenty-seven countries outside the United States and Canada with 6,153 marketing related employees. In North America, on the other hand, Ford employed 10,320 marketing personnel.

In the U.S. and Canada, thirteen marketing units² existed in 1977, compared to a total of twenty-eight abroad (one unit in each country)³. All of the marketing units abroad served primarily national markets. None serviced markets in more than one region and none serviced the U.S. market. Exhibit C-6 shows the specific locations of these sales/marketing operations.

¹Ford Motor Company, Annual Report, 1976.

²A marketing unit is a separate entity, in a legal or organizational sense, with responsibilities for at least one marketing activity (sales, distribution, advertising, marketing research) for a given territory.

³The exception is Austria with two marketing units.

Exhibits C-7 through C-9 summarizes the passenger vehicle models that are sold by country for the European, Latin American, and Asia-Pacific areas.

Finally, Exhibits C-10 through C-26 show the organizational position of "sales and marketing" units within regional and national organizations operating abroad.

Exhibit C-1

Ford Motor Company

Automotive and Non-Automotive Sales

1972-1976

Year	<u>Automotive Sales</u>		<u>Non-Automotive Sales</u>
	<u>U.S. & Canada</u>	<u>Overseas</u>	<u>World</u>
	<u>(millions of \$)</u>		
1976	18,855	7,944	2,341
1975	14,765	6,923	2,321
1974	15,750	5,778	2,093
1973	15,785	5,255	1,975
1972	13,980	4,536	1,678

Source: Ford Motor Company, 10K Report.

Exhibit C-2

Ford Motor Company

North American and Overseas Automotive Sales
as Percentage of Total Automotive Sales

<u>Year</u>	<u>North American Automotive Sales as % of Total</u>	<u>Overseas Automotive Sales as % of Total</u>	<u>Total</u>
1976	70.0	30.0	100.0
1975	68.1	31.9	100.0
1974	73.2	26.8	100.0
1973	75.0	25.0	100.0
1972	75.5	24.5	100.0

Source: Exhibit C-1.

Exhibit C-3
Ford Motor Company
Sales by Geographic Area
1975-1976¹

<u>Areas</u>	<u>(millions of \$)</u>	
	<u>1976</u>	<u>1975</u>
U.S. and Canada	19,858	16,129
Europe	5,847	4,734
Latin America	1,783	1,790
Others ²	1,352	1,356
Worldwide Total	28,840	24,009

¹automotive and non-automotive.

²principally Asia-Pacific.

Source: Ford Motor Company, 10K Report.

Exhibit C-4

Ford Motor Company

Regional Sales as Percentage of Total Overseas Sales, 1975-76¹

Year	European Sales as % of Total Overseas Sales	Latin American Sales as % of Total Overseas Sales	Asia-Pacific & Other Sales as % of Total Overseas Sales	Total
1976	65.1	19.9	15.0	100.0
1975	60.1	22.7	17.2	100.0

¹excluding the U.S. and Canada.

Source: Exhibit C-3.

Exhibit C-5

Ford Motor Company

Market Shares of Retail Car and Truck Sales Worldwide

	CARS				TRUCKS			
	1976		1975		1976		1975	
	Industry Unit Sales	Ford Market Share	Industry Unit Sales	Ford Market Share	Industry Unit Sales	Ford Market Share	Industry Unit Sales	Ford Market Share
United States	10,098,000	22.6%	8,628,000	23.6%	3,191,000	30.9%	2,491,000	31.5%
Canada	946,000	19.6	988,000	22.0	342,000	32.0	323,000	33.2
Germany	2,270,000	14.9	2,069,000	13.6	179,000	8.1	146,000	8.7
United Kingdom	1,286,000	25.3	1,194,000	21.7	209,000	31.3	220,000	30.4
Other European Markets*	5,793,000	6.7	5,022,000	5.4	713,000	8.9	565,000	8.4
Brazil	748,000	17.0	711,000	17.3	146,000	29.0	147,000	33.3
Mexico	200,000	11.4	233,000	14.9	105,000	23.2	117,000	19.8
Argentina	130,000	15.2	174,000	15.7	48,000	27.3	53,000	18.1
Other Latin American Markets*	275,000	15.4	252,000	15.2	189,000	19.4	175,000	19.3
Australia	464,000	22.4	468,000	21.7	138,000	19.1	122,000	20.3
South Africa	185,000	15.2	229,000	13.6	115,000	13.5	135,000	14.8
All Other Markets*	3,968,000	1.4	4,231,000	1.5	2,235,000	2.0	2,075,000	2.3
Worldwide Total	26,363,000	14.9%	24,199,000	14.4%	7,610,000	18.9%	6,569,000	18.7%

*1976 data estimated.

Source: Ford Motor Company, Annual Report, 1976.

Exhibit C-6
Ford Motor Company
National Sales Offices and Sales Headquarters

<u>Country</u>	<u>City/Town</u>
Argentina	Buenos Aires
Australia	Geelong
Austria	Salsburg, Vienna
Belgium	Antwerp
Brazil	Sao Paulo
China, Republic of	Chung Li (Taipei)
Denmark	Copenhagen
Finland	Helsinki
France	Paris
Germany	Cologne
Ireland	Cork
Italy	Rome
Japan	Tokyo
Malaysia	Singapore
Mexico	Mexico City
Netherlands	Amsterdam
New Zealand	Lower Hutt
Norway	Kobotn
Philippines	Manila
Portugal	Lisbon
South Africa	Port Elizabeth
Spain	Madrid
Sweden	Stockholm
Switzerland	Zurich
United Kingdom	Brentwood
Uruguay	Montevideo
Venezuela	Caracas

Source: Ford Motor Company, International Automotive Operations, Information Background: Ford Around the World, September 1, 1977.

EUROPEAN AUTOMOTIVE OPERATIONS

Car Summary By Country

Exhibit C-7
Ford Motor Company

	Fiesta	Escort	Taurus	Cortina	Capri II	Granada
Austria	X	X	X		X	X
Belgium	X	X	X		X	X
Britain	X	X		X	X	X
Denmark	X	X	X		X	X
Finland	X	X	X		X	X
France	X	X	X		X	X
Germany	X	X	X		X	X
Ireland	X	X		X	X	X
Italy	X	X	X		X	X
Netherlands	X	X	X		X	X
Norway	X	X	X		X	X
Portugal		X		X	X*	X*
Spain	X	X*	X*		X*	X*
Sweden	X	X	X		X	X
Switzerland	X	X	X		X	X

* Limited sales due to quota system

LATIN AMERICAN AUTOMOTIVE OPERATIONS*
 Exhibit C-8
 Car Summary By Country

Ford Motor Company

Engines	Argentina			Brazil			South Africa			Mexico			Venezuela		
	Taurus	Falcon	Fairlane	Corcel	Maverick	Ford	Escort (FAO)	Cortina (FAO)	Granada (FAO)	Mustang	Maverick	Ford	Maverick	Fairlane	Ford
I-4 1.3 litre							X								
1.4 litre				X											
1.6 litre							X	X							
2.0 litre	X														
2.3 litre	X				X										
V-4 2.0 litre								X							
V-6 2.5 litre								X							
3.0 litre								X							
I-6 188 CID		X													
221 CID		X	X												
250 CID															
V-8 292 CID			X												
302 CID					X	X									
351 CID															
400 CID															X
Transmissions															
Manual, 3-speed		X	X		X	X				X	X	X			
4-speed	X	X		X	X	X	X	X	X	X	X	X	X	X	X
Automatic															
Body styles															
Sedan, 2dr				X	X		X			X	X	X	X	X	X
4dr				X	X	X	X	X		X	X	X	X	X	X
Coupe, 2dr	X	X	X												
Hatchback, 2dr	X														
3dr				X											
4dr									X						
Wagon, 4dr		X						X						X	X

(EAO) European Automotive Operations designed

* LAAO includes operations in South Africa

Source: Ford Motor Company, Cars & Trucks: Worldwide, 1977

ASIA-PACIFIC AUTOMOTIVE OPERATIONS

Car Summary By Country

Exhibit C-9

	Ford Motor Company						Japan*
	<u>Australia</u>	<u>New Zealand</u>	<u>Philippines</u>	<u>Singapore</u>	<u>Malaysia</u>	<u>Taiwan</u>		Thailand
Escort	X	X	X	X	X	X	X
Cortina	X	X	X	X	X	X	X
Falcon	X	X					
Fairlane	X						
Ford	X						

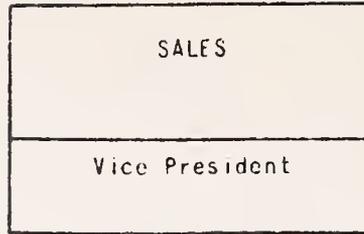
*Japan imports products from Europe and North America, including the Bobcat, Mustang II, Granada (U.S. version), Monarch, Cougar, Mercury, Thunderbird, Lincoln Continental and Continental Mark V.

Truck Summary By Country

	<u>Australia</u>	<u>New Zealand</u>	<u>Philippines</u>	<u>Singapore</u>	<u>Malaysia</u>	<u>Taiwan</u>	<u>Thailand</u>	<u>Japan</u>
Light Trucks								
Escort (van)	X	X		X	X			
Falcon (van)	X							
Falcon (utility)	X	X				X	X	
Fiera			X					
Transit	X	X		X	X			
F-Series (NAAO)	X		X					
Heavy Trucks								
D-Series	X	X	X	X	X		X	
F-Series	X							
R-Series (bus chassis)		X		X	X		X	
L-Series	X		X					
B-Series			X					

Source: Ford Motor Company, Cars & Trucks: Worldwide, 1977

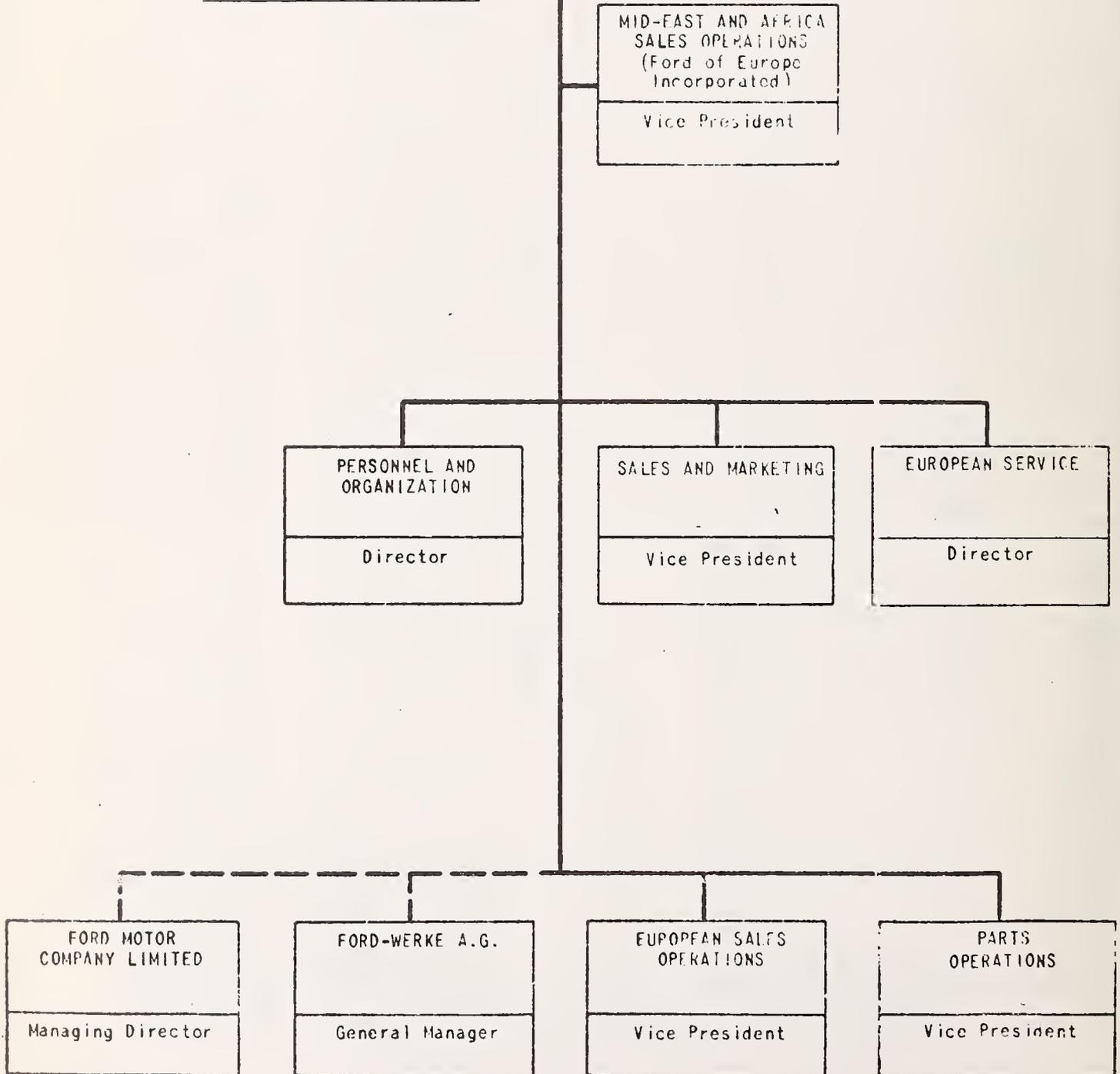
SALES



NOTE:

THE PRIMARY FUNCTION OF FORD OF EUROPE INCORPORATED IS TO CO-ORDINATE THE AUTOMOTIVE ACTIVITIES OF THE EUROPEAN FORD COMPANIES. THE PURPOSE OF THIS CHART IS TO INDICATE THE MANNER IN WHICH THESE ACTIVITIES ARE CO-ORDINATED AND THE INDIVIDUALS WHO ARE RESPONSIBLE FOR CO-ORDINATION. THE HORIZONTAL LINES INDICATE AREAS OF COMMUNICATION AND CO-ORDINATION RESPONSIBILITY TO THE EXTENT THAT AN EMPLOYEE OF A FORD COMPANY RENDER CO-ORDINATING SERVICES ON BEHALF OF THAT COMPANY TO ANOTHER FORD COMPANY THE COST OF SUCH SERVICES IS BILLED TO THE COMPANY RECEIVING SUCH SERVICES. THE MANAGEMENT OF THE AFFAIRS OF EACH FORD COMPANY CONTINUES TO BE THE RESPONSIBILITY OF THE BOARD OF DIRECTORS OR OTHER GOVERNING BODY OF THAT COMPANY.

Exhibit C-10
Ford Motor Company

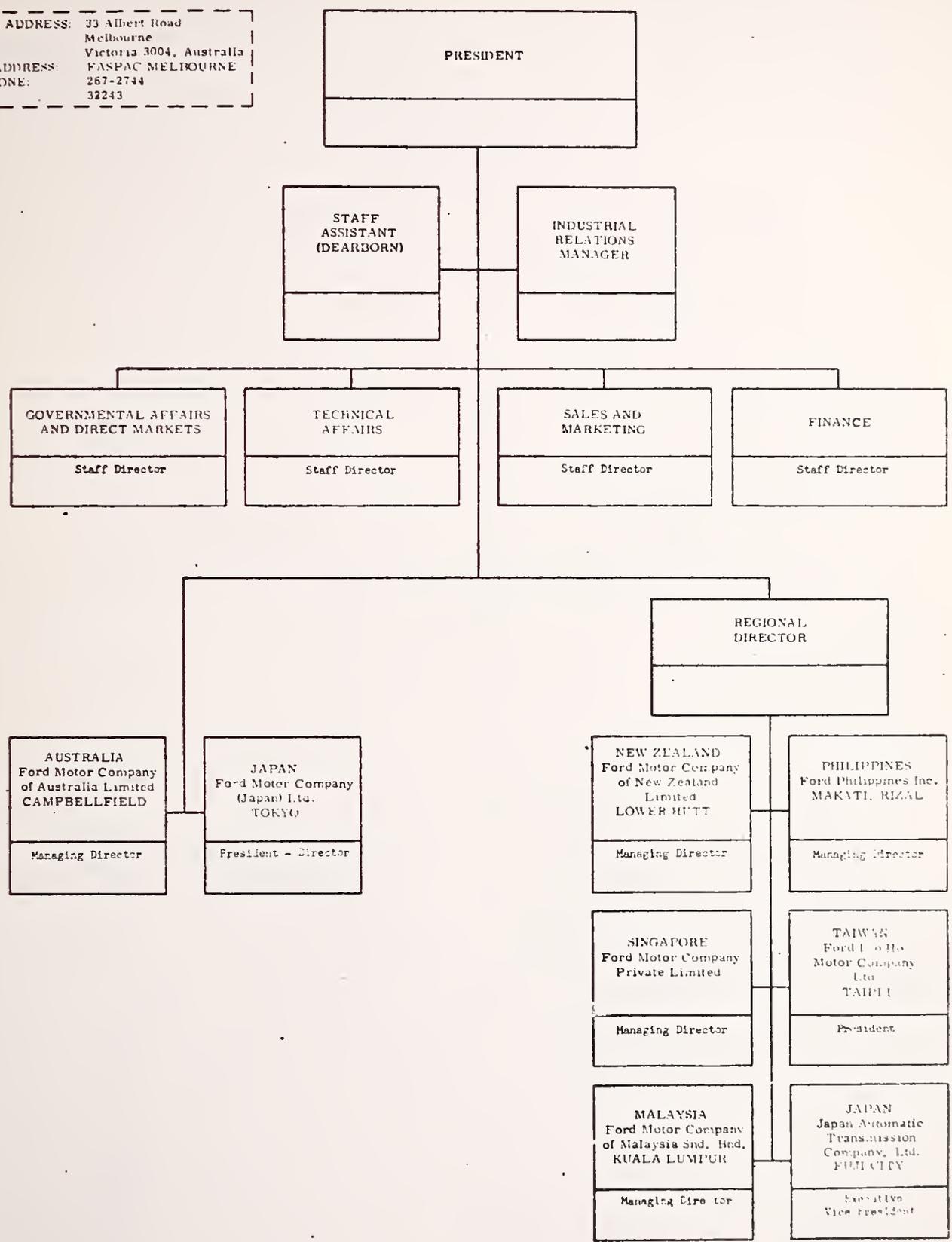


Ford Motor Company

FORD ASIA-PACIFIC, INC.

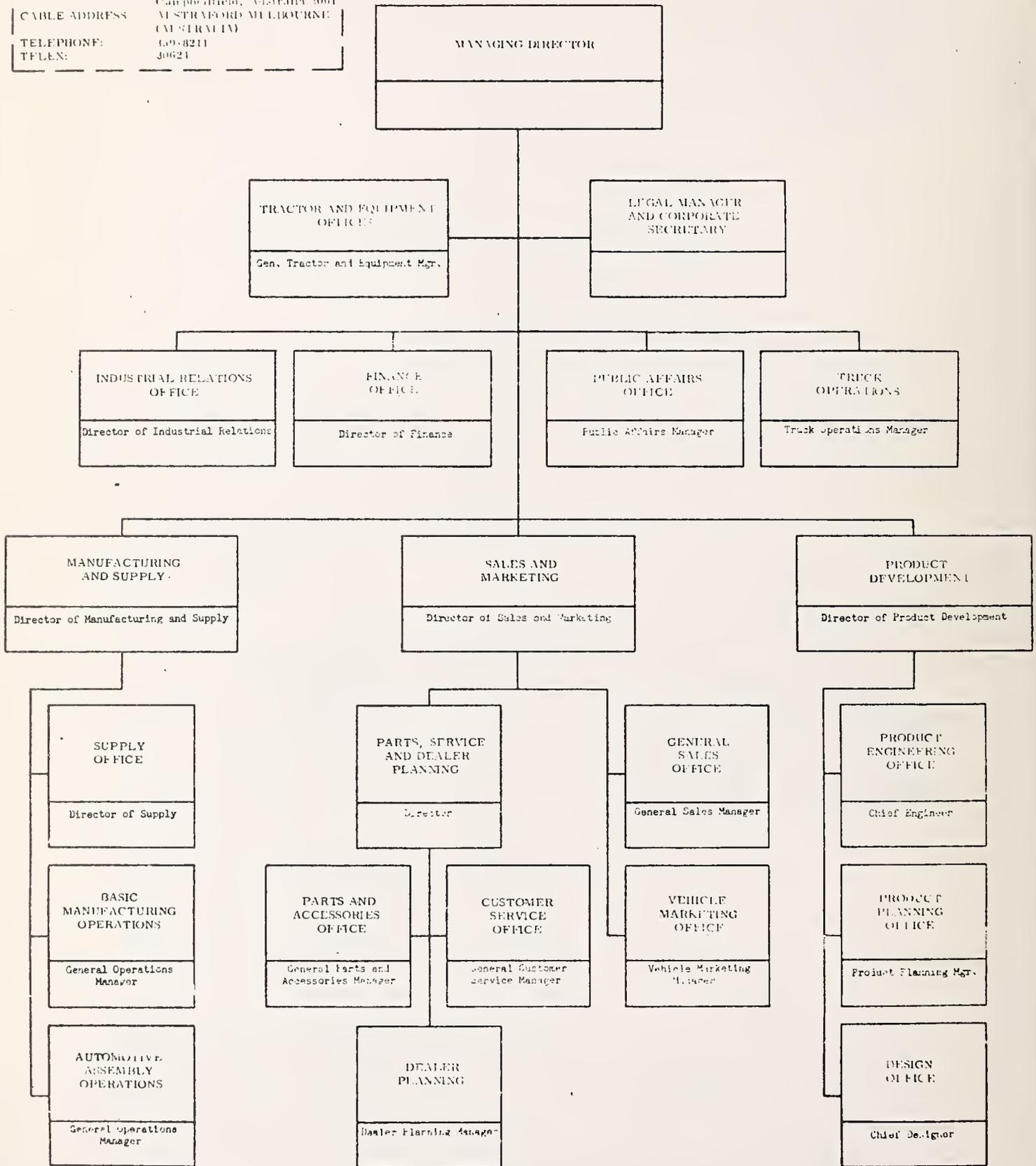
FORD INTERNATIONAL AUTOMOTIVE OPERATIONS

MAILING ADDRESS: 33 Albert Road
Melbourne
Victoria 3004, Australia
CABLE ADDRESS: FASPAC MELBOURNE
TELEPHONE: 267-2744
TELEX: 32243



Ford Motor Company
FORD MOTOR COMPANY OF AUSTRALIA LIMITED

MAILING ADDRESS: Private Mail Bag 6
 Campbellfield, Australia 3061
 CABLE ADDRESS: ALSTRAFORD MLLBOURNE
 AUSTRALIA
 TELEPHONE: 69-8211
 TELEFAX: 30624



The General Tractor and Equipment Manager is delegated operational authority to manage the subsidiary's tractor business and receives marketing advice and assistance from Tractor Operations - Overseas Affiliates.

FORD MOTOR COMPANY (JAPAN) LTD.

MAILING ADDRESS: Toranomon Yamakatsu Building
1-40 Toranomon 4-Chome
Minato-Ku, Tokyo 100
Japan
CABLE ADDRESS: FOMOJA TOKYO
TELEPHONE: 436-0191
TELEX: 242-5055

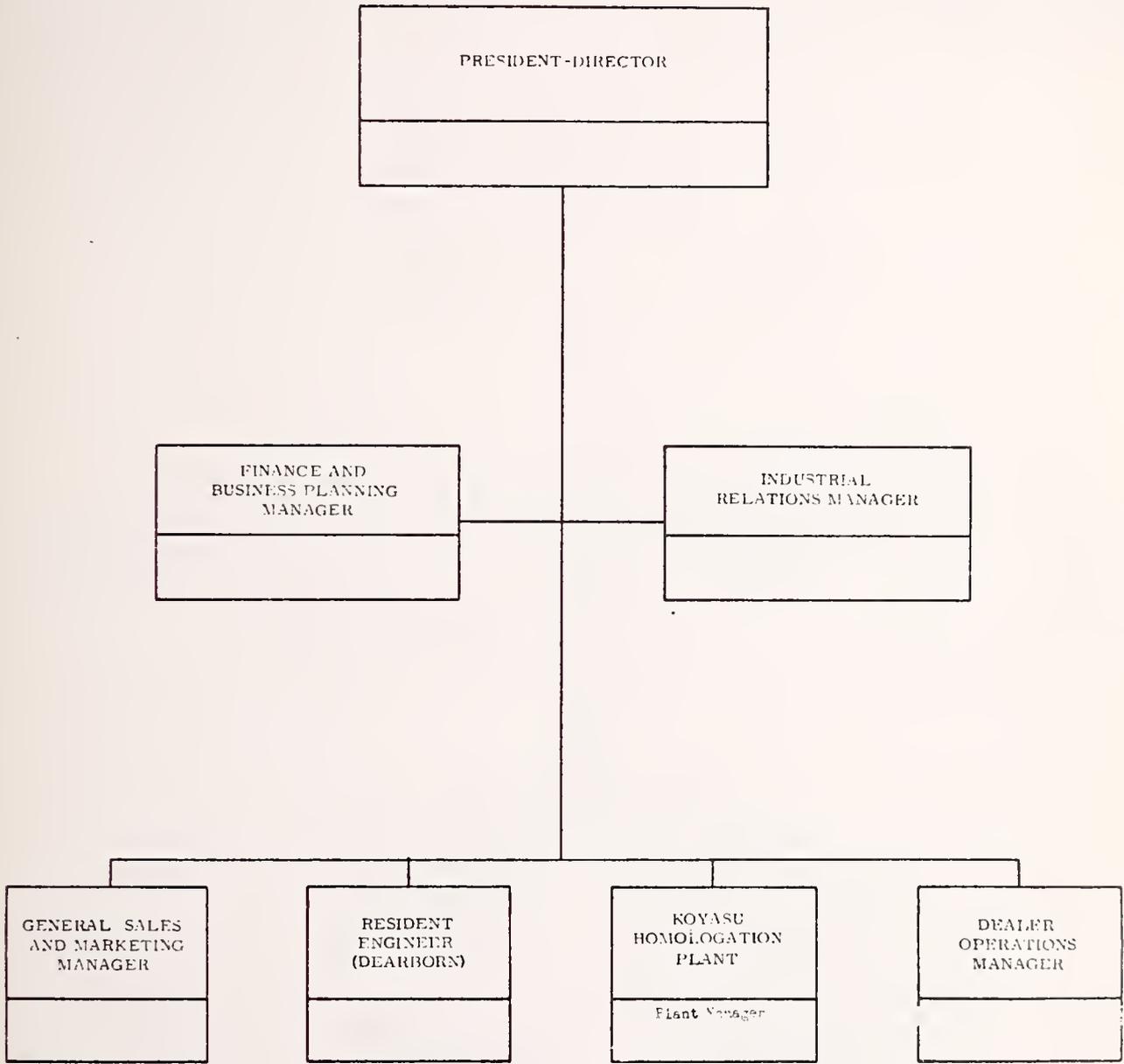
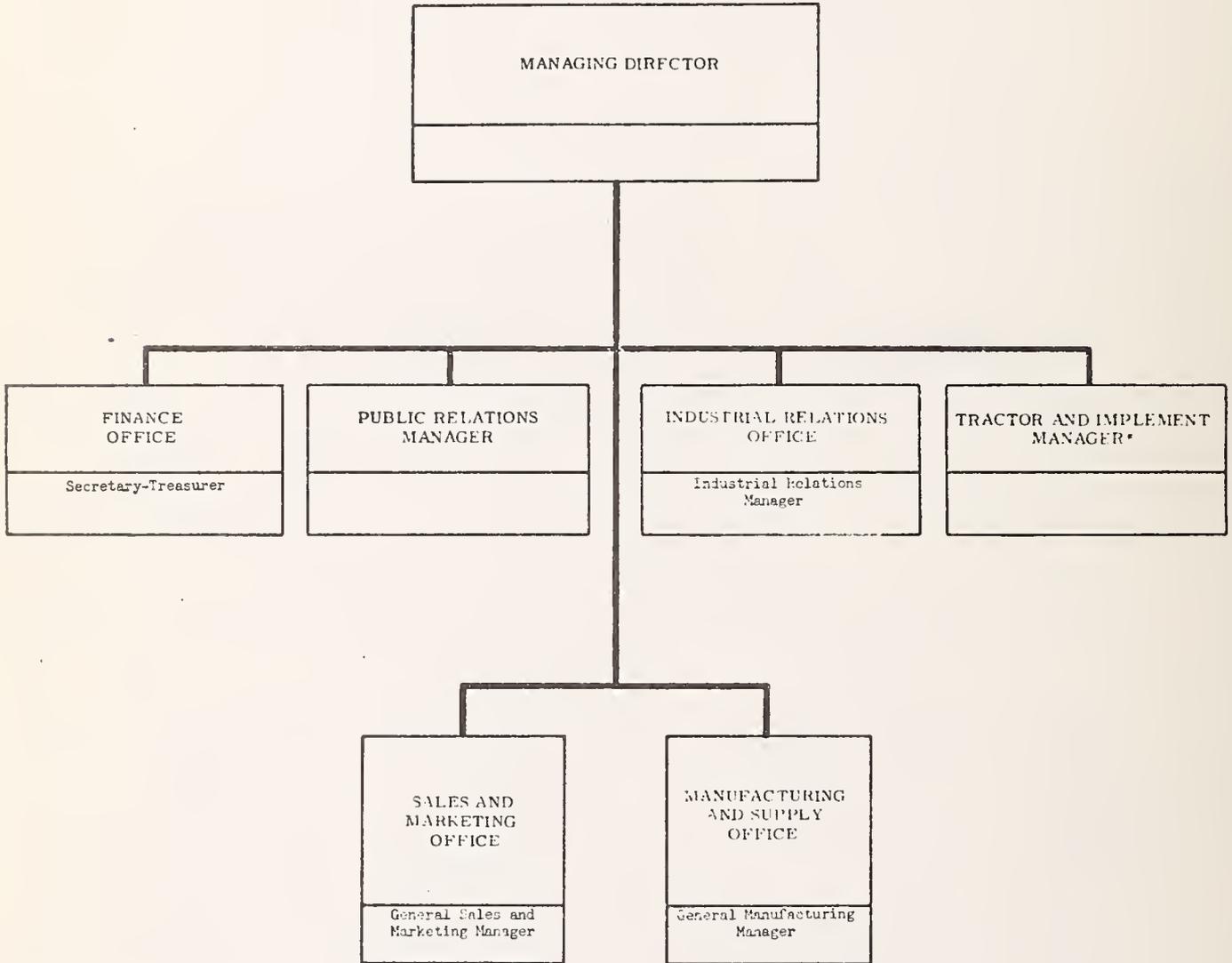


Exhibit C-14
Ford Motor Company

FORD MOTOR COMPANY OF NEW ZEALAND LIMITED 100

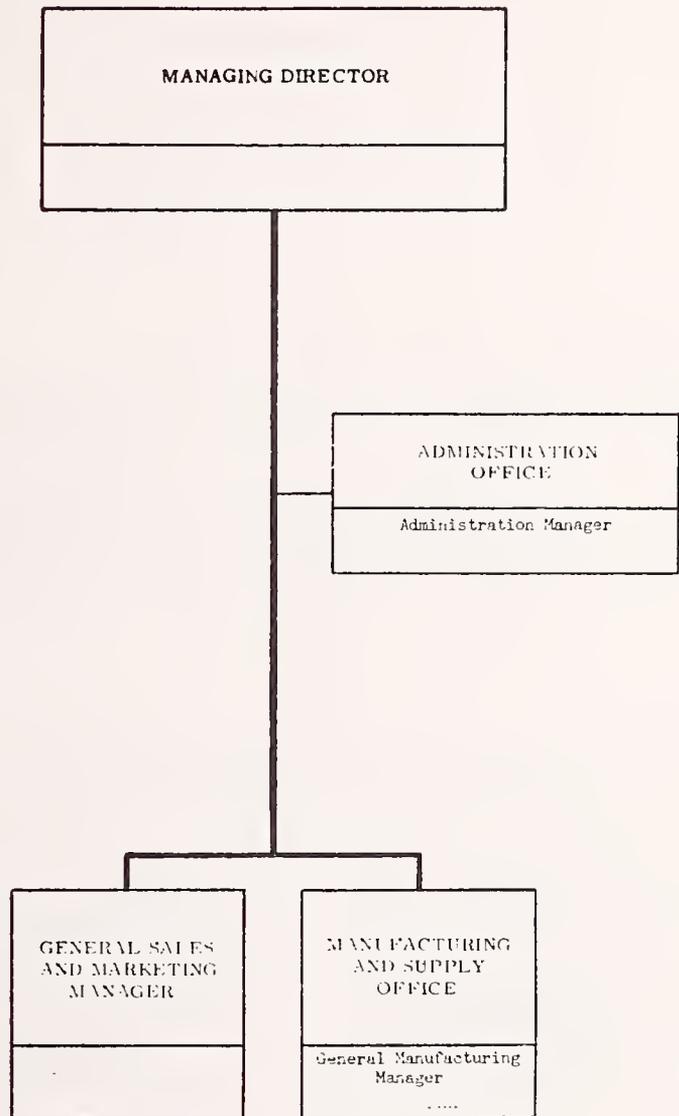
MAILING ADDRESS:	P. O. Box 30012 Lower Hutt, New Zealand
CABLE ADDRESS:	NEWZEAFORD, WELLINGTON
TELEPHONE:	666-909
TELEX:	3411



*The Tractor and Implement Manager is delegated authority to manage the subsidiary's tractor business and receives marketing advice and assistance from Tractor Operations - Overseas Affiliates.

FORD MOTOR COMPANY PRIVATE LIMITED

MAILING ADDRESS: P. O. Box 4047
Bukit Timah Post Office
Singapore
CABLE ADDRESS: SINGA FORD SINGAPORE
TELEPHONE: 666111
TELEX: 21616

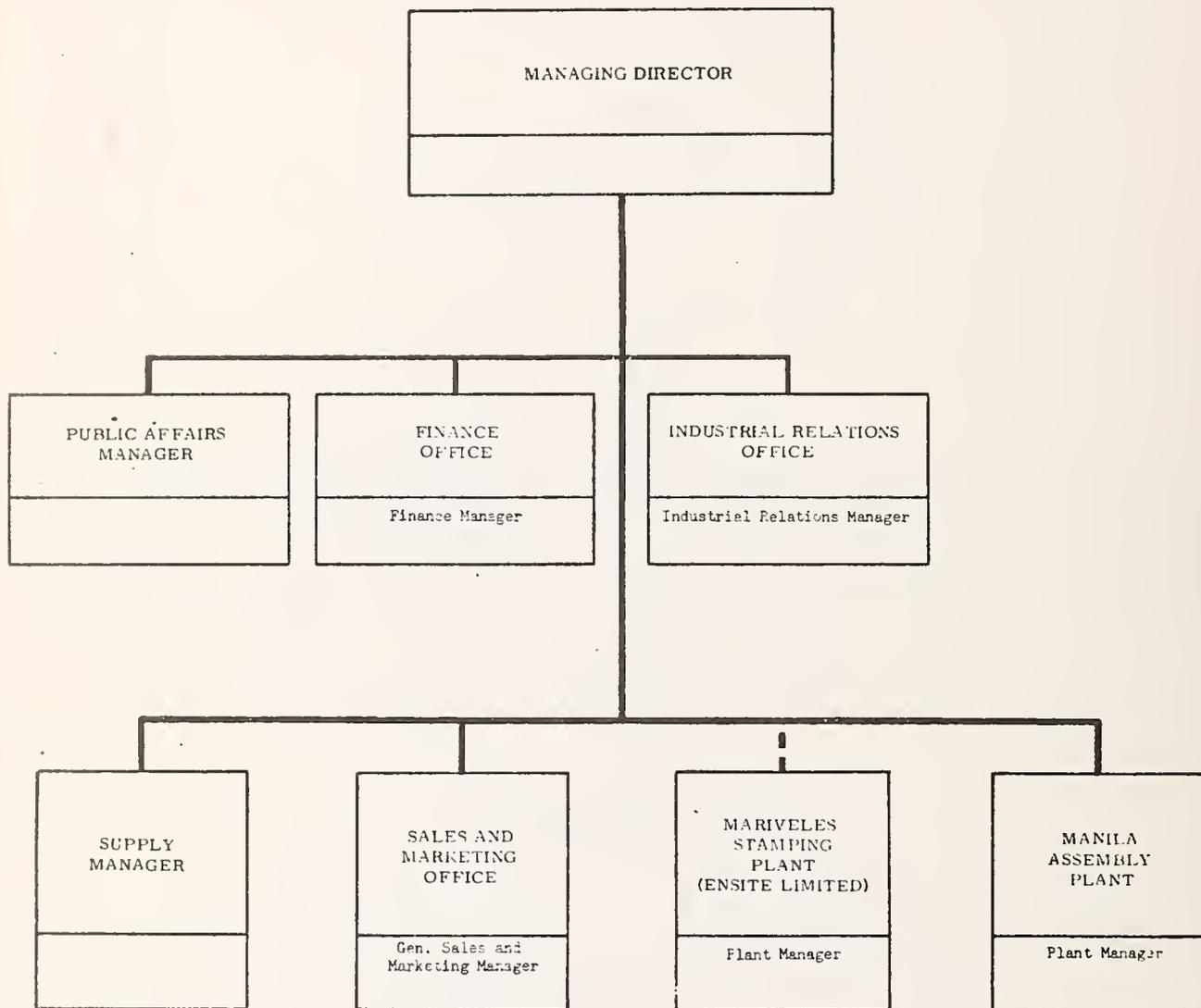


FORD PHILIPPINES INC.

Exhibit C-16

Ford Motor Company

MAILING ADDRESS: P. O. Box 415
Makati Commercial Center
Makati, Rizal 3117, Philippines
TELEFAX: 7420919
CABLE ADDRESS: FORDPHIL MANILA
TELEPHONE: 83 98 51
83 53 44
83 54 44

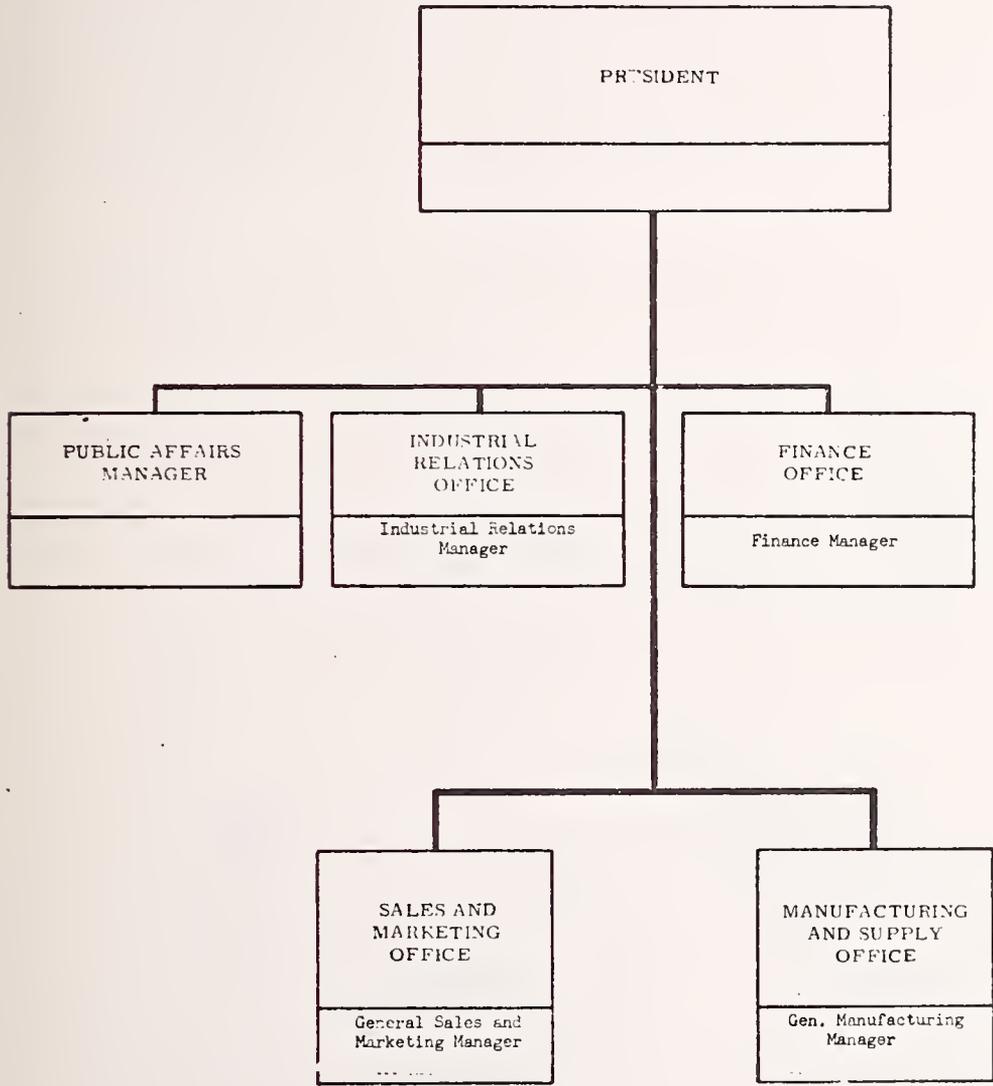


FORD LIO HO MOTOR COMPANY LTD.
(TAIWAN)

Exhibit C-17

Ford Motor Company

MAILING ADDRESS: P. O. Box 12
Chungli, Taoyuan
Taiwan 320
Republic of China
CABLE ADDRESS: FORD1H
TELEPHONE: (Chung Li) 42 3131-50
TELEX: 35167



FORD MOTOR COMPANY (THAILAND) LIMITED

Exhibit C-18

Ford Motor Company

MAILING ADDRESS:	G. P. O. Box 11-2 Prakanong, Bangkok, Thailand
CABLE ADDRESS:	FORD THAI
TELEPHONE:	910-030, 910-943
TELEX:	FORDTHAI BKK 379

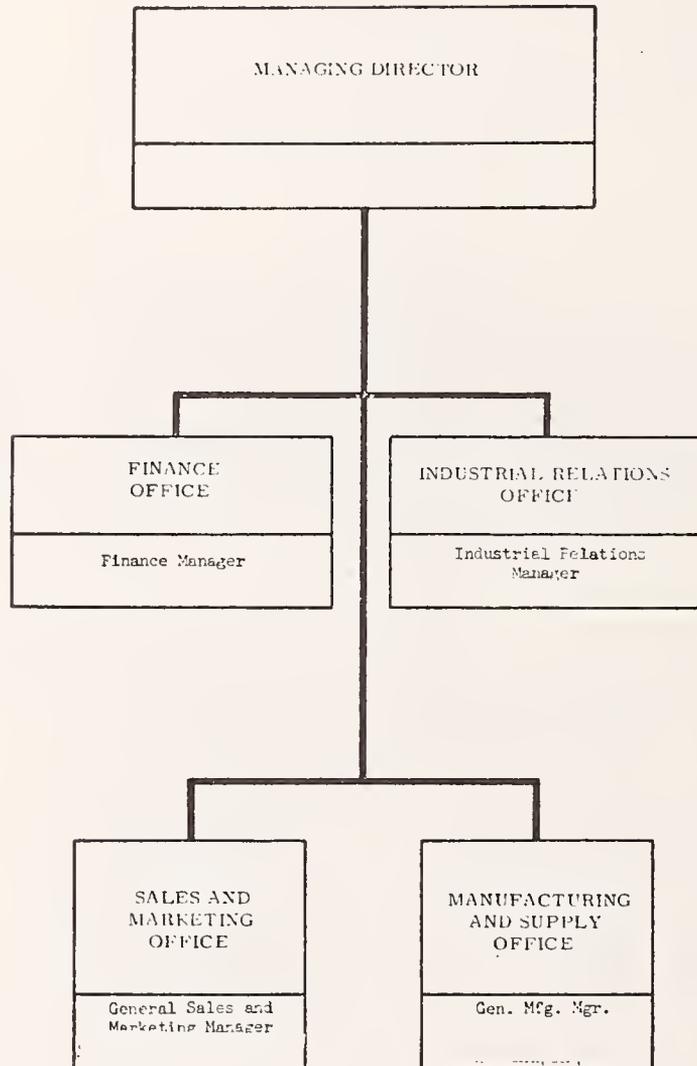


Exhibit C-19
Ford Motor Company

FORD LATIN AMERICA, S.A. de C.V.
FORD INTERNATIONAL AUTOMOTIVE OPERATIONS

MAILING ADDRESS: Apartado Postal 2897
 Mexico 1, D. F.
 CABLE ADDRESS: FORDLAT MEXICO (MEXICO)
 TELEPHONE: 525-92-00
 TELEX: 017-74-210

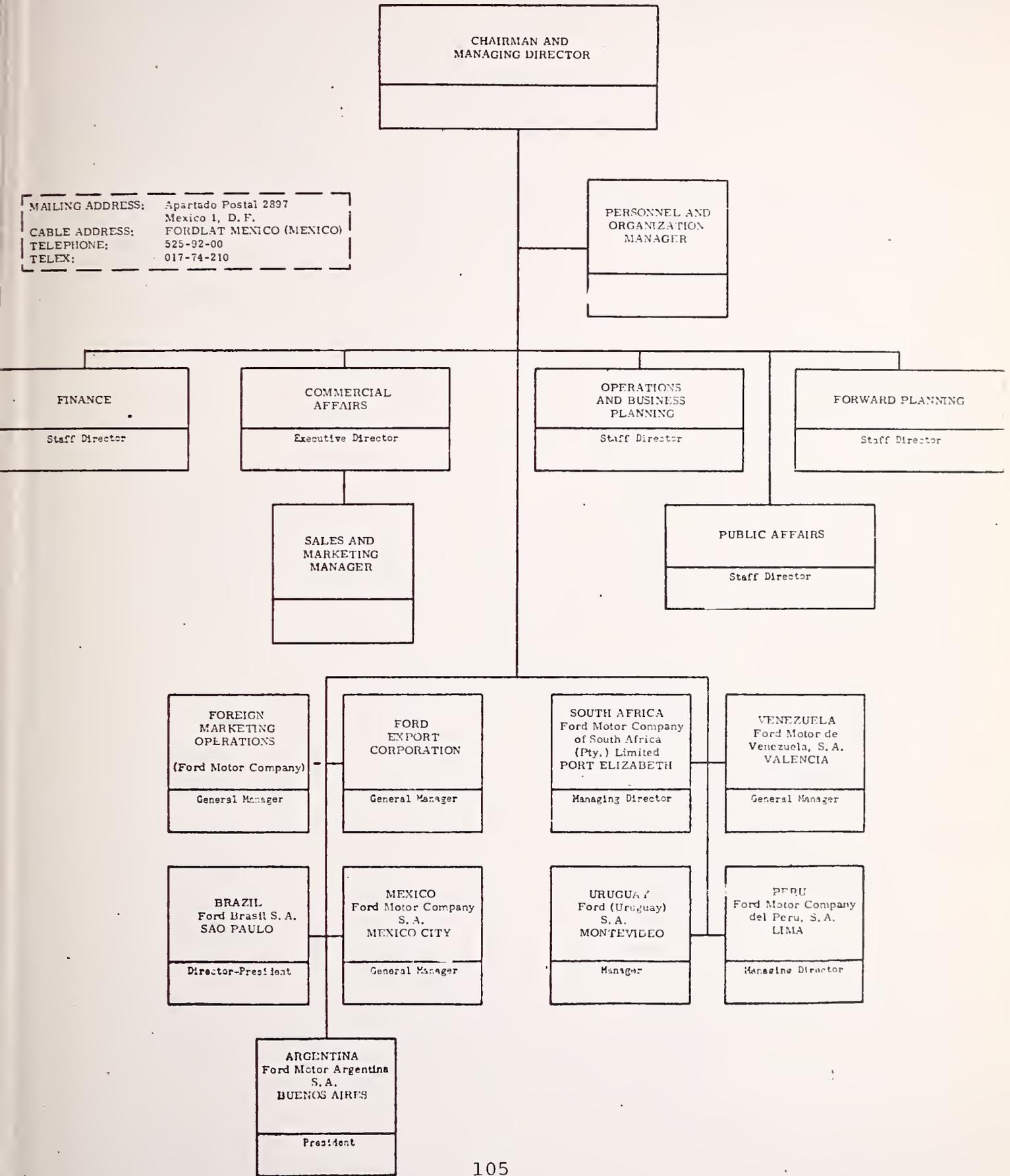
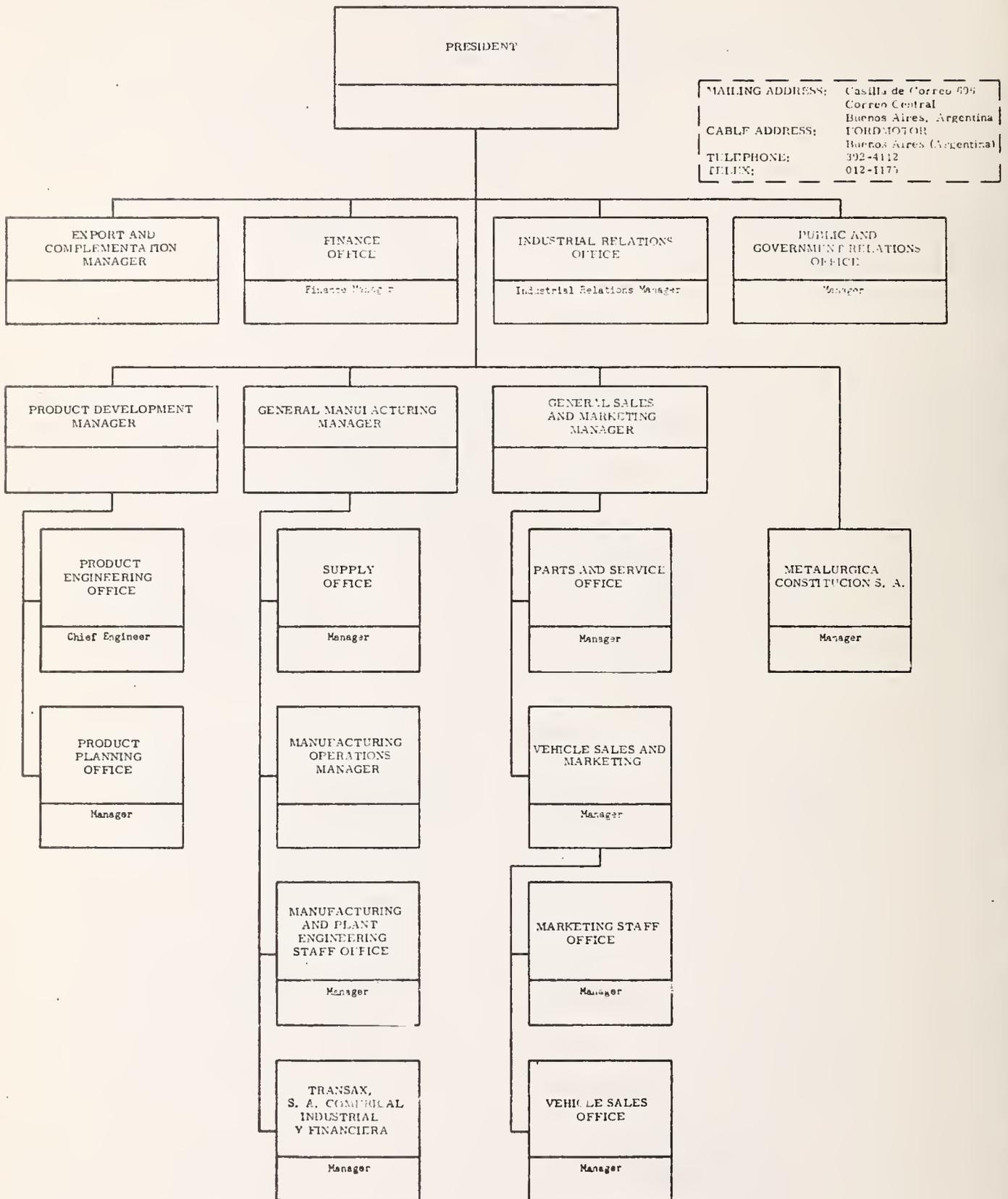


Exhibit C-20
Ford Motor Company
FORD MOTOR ARGENTINA S.A.

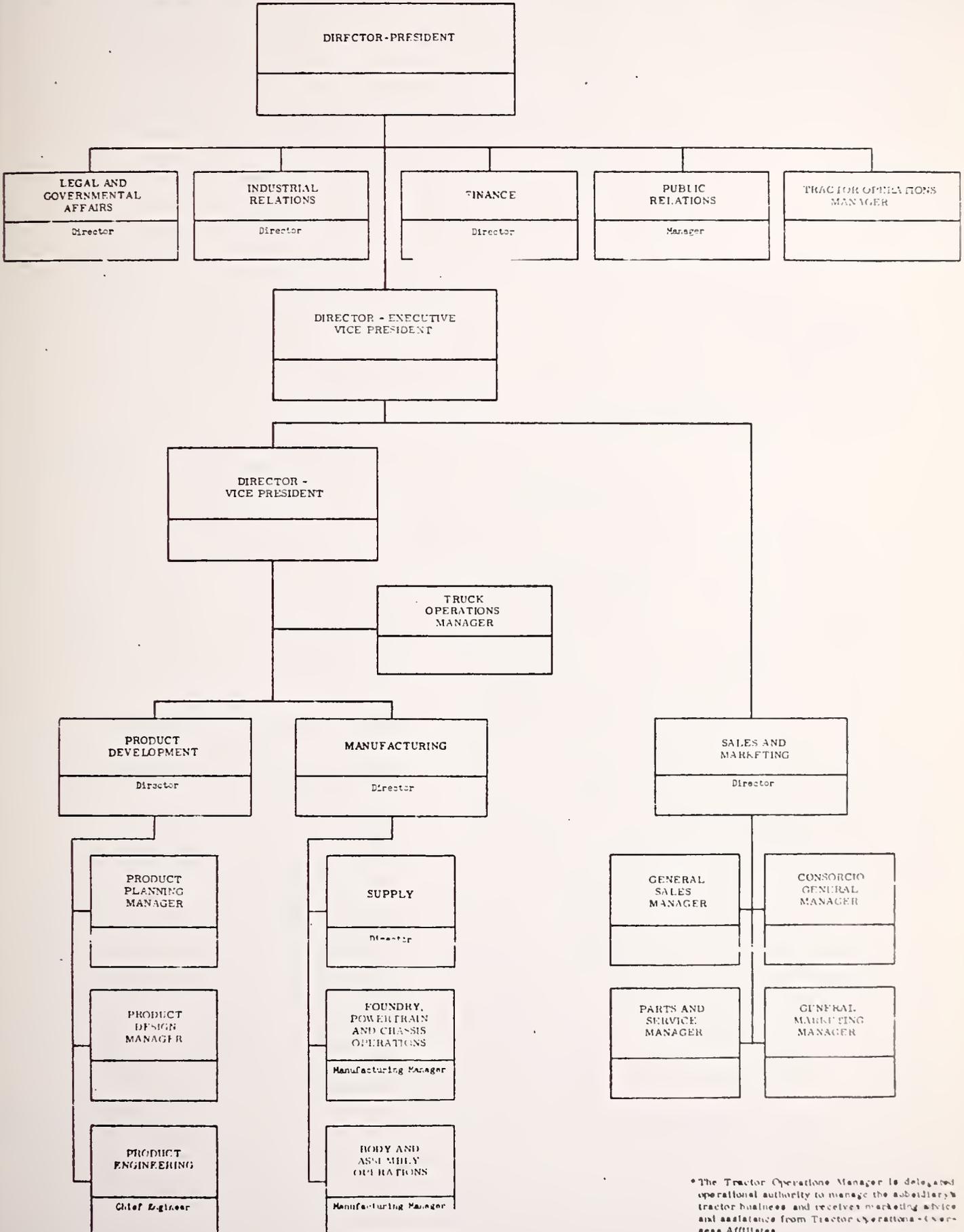


MAILING ADDRESS: Casilla de Correo 604
 Correo Central
 Buenos Aires, Argentina
 FORD MOTOR
 CABLE ADDRESS: Buenos Aires (Argentina)
 392-4112
 TELEPHONE:
 TELEX: 012-1175

FORD BRASIL S.A.

MAILING ADDRESS: Caixa Postal 8610
 Sao Paulo, Brasil
 CABLE ADDRESS: FORD MOTOR SAO
 PAULO (BRAZIL)
 TELEPHONE: Sao Bernardo 437-1333
 TELEX: Sao Bernardo 023-867

Exhibit C-21 Ford Motor Company

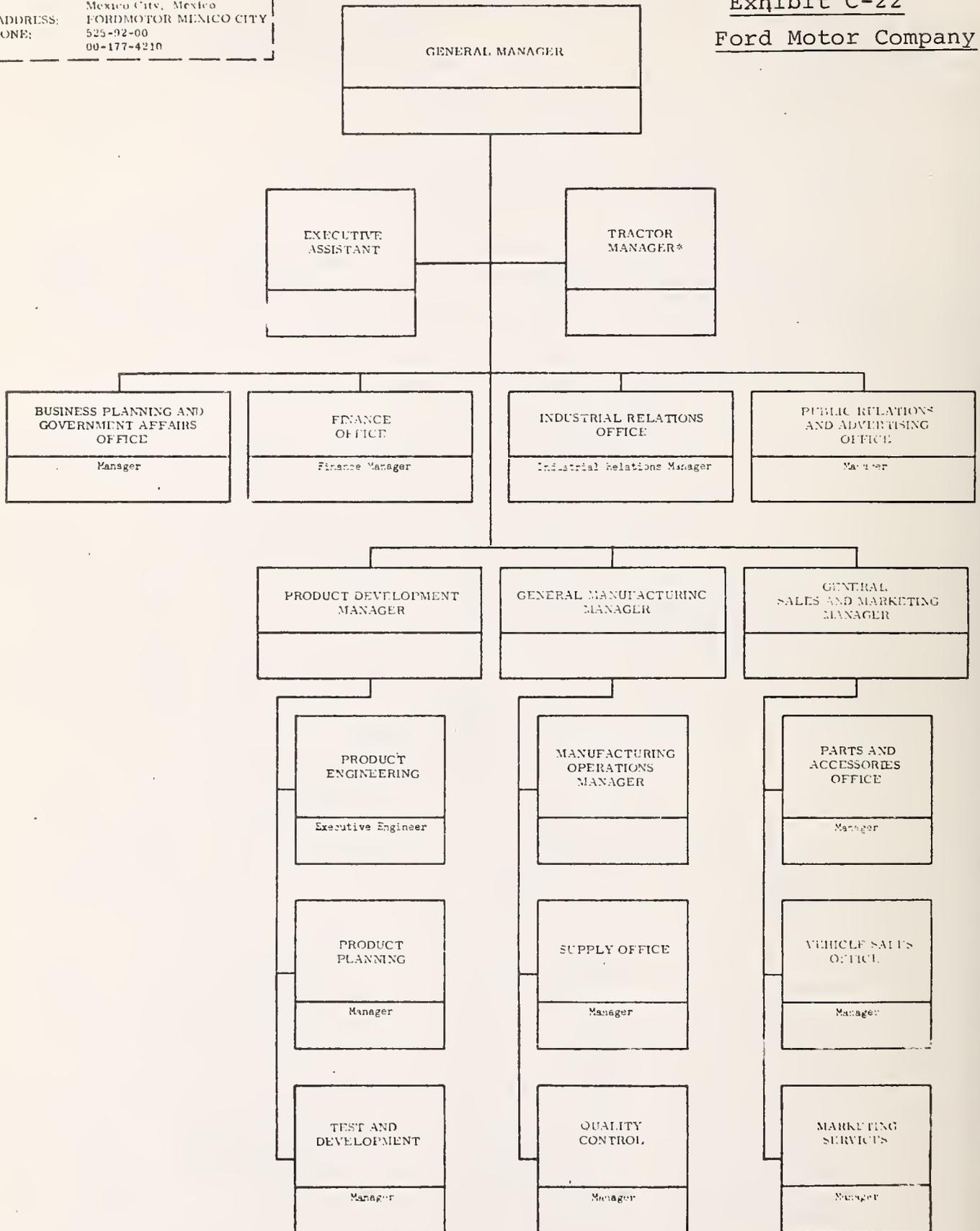


*The Tractor Operations Manager is delegated operational authority to manage the subsidiary's tractor business and receives marketing advice and assistance from Tractor Operations - Overseas Affiliates.

FORD MOTOR COMPANY S.A. (MEXICO)

MAILING ADDRESS: Apartado Postal 39 Bis
Mexico City, Mexico
CABLE ADDRESS: FORDMOTOR MEXICO CITY
TELEPHONE: 525-92-00
TELEX: 00-177-4210

Exhibit C-22
Ford Motor Company



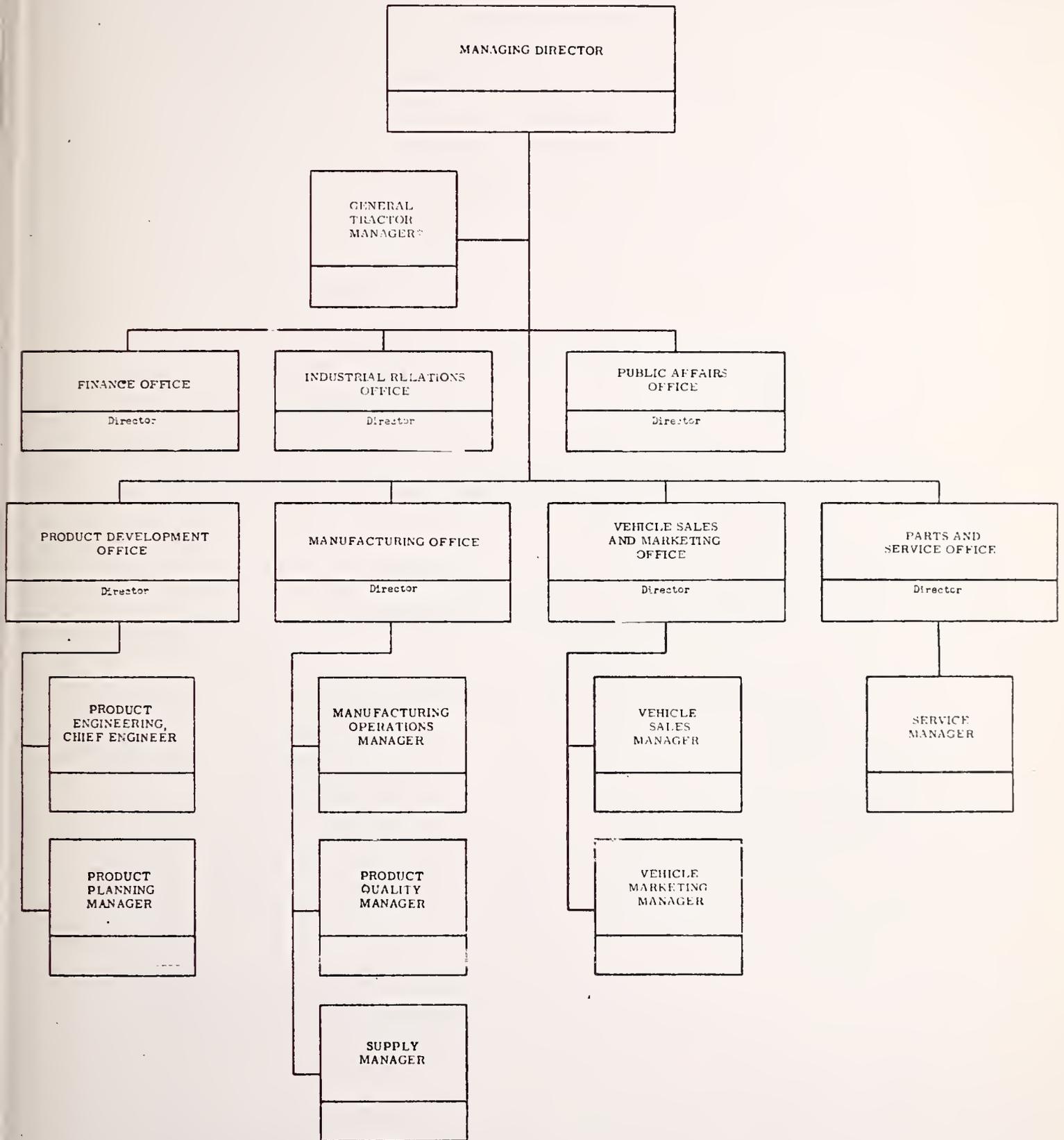
The Tractor Manager is delegated operational authority to manage the subsidiary's tractor business and receives marketing advice and assistance from Tractor Operations - Overseas Affiliates.

FORD MOTOR COMPANY OF SOUTH AFRICA (PTY) LIMITED

Exhibit C-23

Ford Motor Company

MAILING ADDRESS: P. O. Box 788
 Port Elizabeth, South Africa
 CABLE ADDRESS: FORD AFRICA PORT ELIZABETH
 (SOUTH AFRICA)
 TELEPHONE: 27011
 TELEX: 74-7411 PE



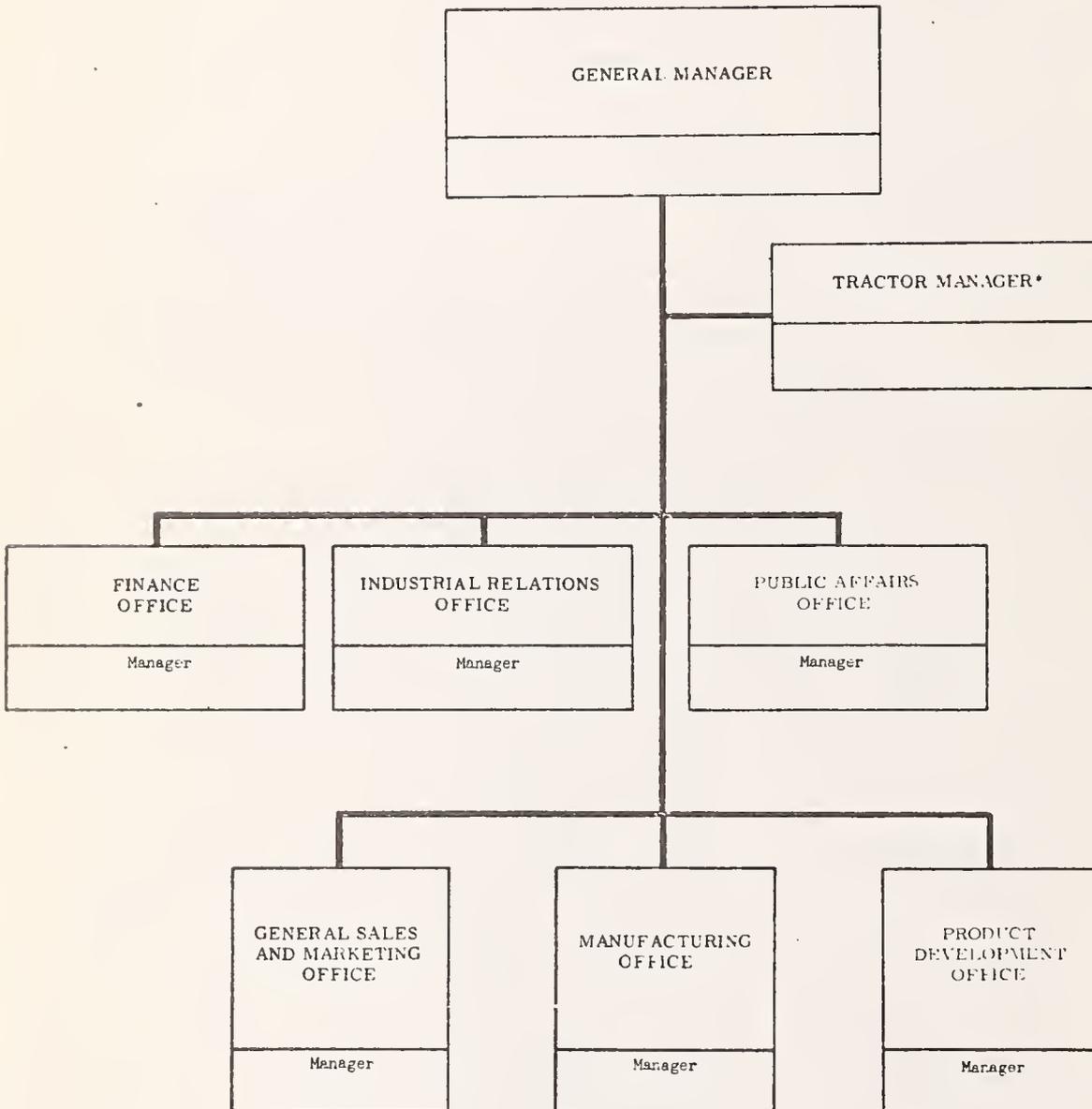
*The General Tractor Manager is delegated operational authority to manage the subsidiary's tractor business and receives marketing advice and assistance from Tractor Operations Overseas Affiliates.

FORD MOTOR de VENEZUELA, S.A.

Exhibit C-24

Ford Motor Company

MAILING ADDRESS:	Apartado 61131 del Este Caracas, Venezuela
CABLE ADDRESS:	FORDMOTOR CARACAS (VENEZUELA)
TELEPHONE:	Caracas 765377
TELEX:	Caracas 22740



*The Tractor Manager is delegated operational authority to manage the subsidiary's tractor business and receives marketing advice and assistance from Tractor Operations - Overseas Affiliates.

FORD (URUGUAY) S.A.

Exhibit C-25

Ford Motor Company

MAILING ADDRESS:	Casilla de Correo 296 Montevideo, Uruguay
CABLE ADDRESS:	FORDMOTOR MONTEVIDEO (URUGUAY)
TELEPHONE:	20-75-21
TELEX:	398-396

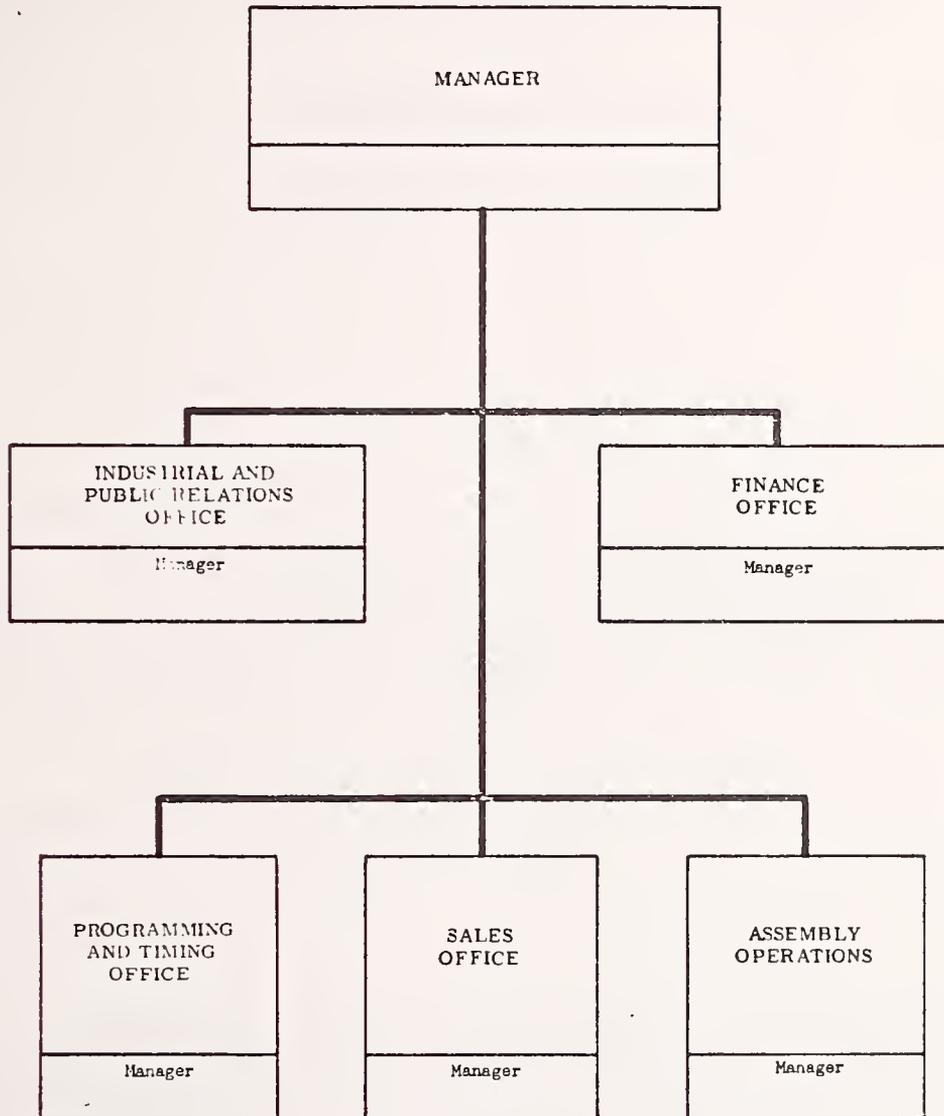
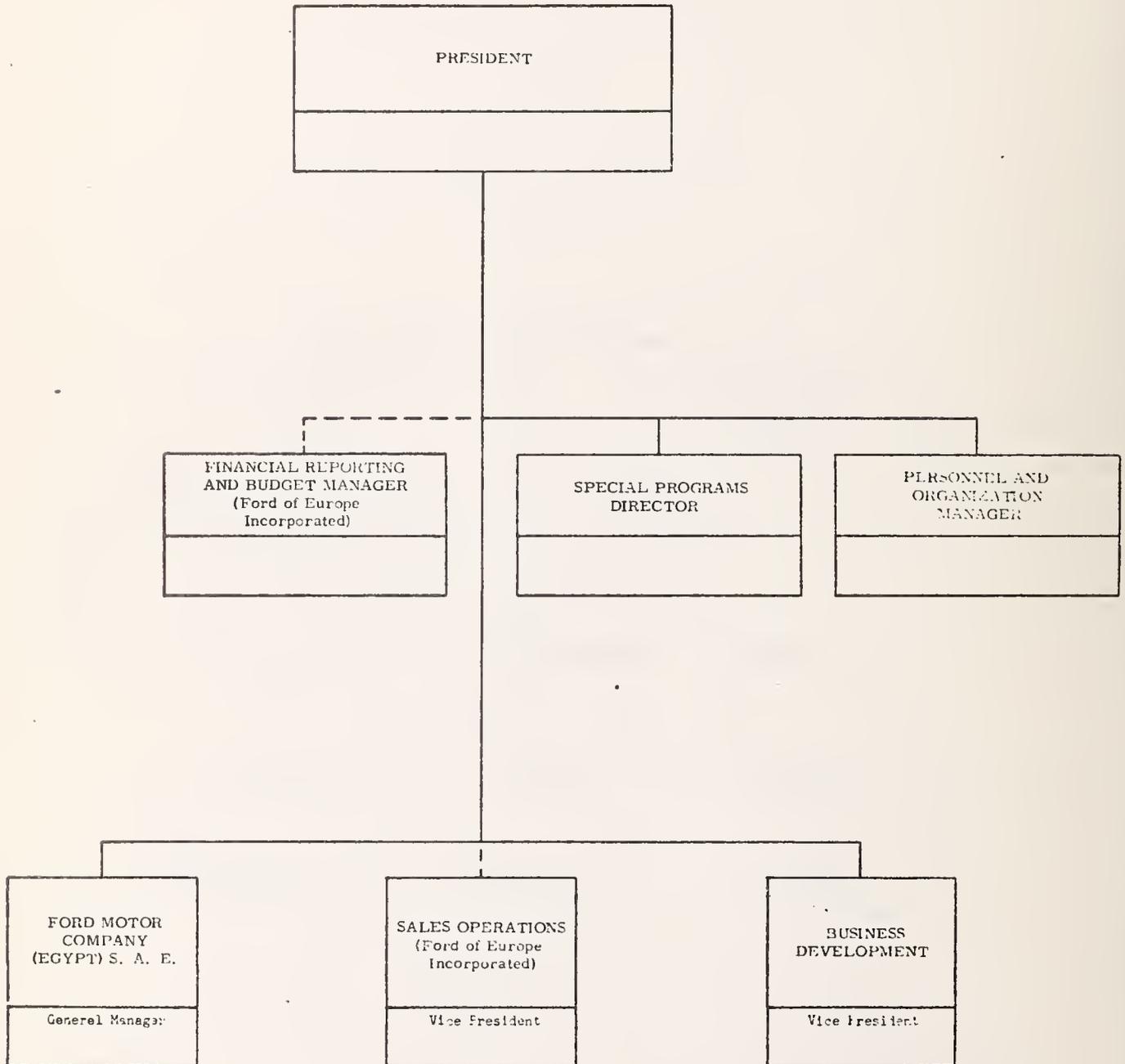


Exhibit C-26
Ford Motor Company

FORD MID-EAST AND AFRICA, INCORPORATED
FORD INTERNATIONAL AUTOMOTIVE OPERATIONS



3. CHRYSLER CORPORATION

3.1 RESEARCH, DEVELOPMENT, AND ENGINEERING ABROAD

Chrysler's research, development and engineering (R D&E) expenditures are primarily focused on (1) fuel economy, (2) emissions control, and (3) safety. In support of these activities, Chrysler is also investigating (1) low weight materials, (2) electronic controls for engine operations, (3) the light diesel engine, and (4) the turbine engine. While most of this R D&E is done in the U.S., Chrysler does conduct some R D&E operations abroad.

Chrysler's U.S. R D&E is undertaken for both the domestic and foreign markets¹ while its foreign R D&E is primarily concerned with national or regional markets.

As shown in Exhibit A-1 , Chrysler's R D&E expenditures have fluctuated substantially over the past six years.

¹Chrysler has R D&E facilities in the U.S. at the following locations: (1) Defense Group, Highland Park, Mi., (2) Engineering, Product Development and Purchasing, Highland Park, MI, (3) Marine Products, warren, MI, (4) Amplex Division, Detroit, MI, (5) Chemical Division, Trenton, MI (6) Defense Division, Center Line, MI, (7) Huntsville Electronic Division, Huntsville, AL, (8) Arizona Test Station, Phoenix, AZ, (9) California Emissions Test Facility, Santa Fe Springs, CA (10) Proving Ground, Chelsea, MI.

During 1976, Chrysler and its consolidated subsidiaries spent \$280.4 million on R D&E and employed 2500 professional employees. Of this total expenditure, \$42.8 million was done as customer-sponsored research employing 200 professionals. For 1976, R D&E expenditures comprised (approximately) 2% of its total sales and RD&E employment comprised (approximately) 1% of total employment. As can be seen in Exhibit A-2 , percentages are representative of the past five years.

Chrysler Corporation was not willing to estimate roughly how much RD&E was performed abroad. However, Exhibit A-3 shows that, in terms of total **space for facilities** devoted to Engineering and Research, Chrysler's U.S. operations comprised roughly two-thirds, while its foreign operations comprise one-third of the facilities space. This study was unable to find a breakdown of the research versus the engineering facilities, but we believe the majority of the foreign space is devoted to engineering rather than research. This belief is supported by data presented by General Motors and Ford in Chapters II and III that showed a tendency exists for manufacturing operations to accompany engineering operations. Inasmuch as Chrysler has thirty-four manufacturing plants in twelve foreign countries, this study feels that the majority of "research and engineering" space is devoted to engineering activities.

Exhibit A-4 shows that Chrysler devoted approximately 3.6% of its domestic facilities space to "Engineering and Research" while its foreign operations devoted (approximately) 2.6% of its facilities use to the same functions. Again, as revealed in Exhibit A-4, these figures have held fairly stable over the past five years.

Virtually all of Chrysler's foreign RD&E has been obtained through the acquisition of Simca in France (1958)¹, Rootes Motors Corporation, Ltd. in England (1964)² and Barrieros, Ltd. in Spain³.

In 1967, Chrysler consolidated its European operations by forming the Chrysler Europe Corporation. The corporation managed Chrysler's international (1) marketing, (2) financing, (3) administration, (4) production, (5) planning and (6) development. Within this organization, each division has an executive director who reports to the President of Chrysler.

In Europe, approximately 2000 individuals report to the Director of Product Planning and Development.⁴

¹Chrysler purchased a 15% share of Simca in 1958 and subsequently increased its share to 64% in 1963. In 1970, Chrysler changed Simca's name to Chrysler, France. Today, it owns 99.6% of this company.

²Chrysler purchased a minority share of Rootes in 1964. In 1967, it increased its share to enjoy majority control. Today, Rootes is a wholly-owned subsidiary whose name has been changed to Chrysler, United Kingdom.

³Chrysler purchased Simca, Rootes and Barrieros for their productive capabilities of their existing product lines rather than for their R&D capabilities. For instance, Simca was originally a part of Fiat and Fiat, an Italian firm, did most of its R&D in Italy. While there was definitely a transfer of technology and engineering through this European acquisition, the manufacturing aspects appear to have been much more important.

⁴Figures obtained through personal interview.

Of these 2000 employees (includes non-professionals), 1700 are involved with passenger car RD&E while the remaining 300 perform RD&E work for trucks and tractors. Exhibit A-5 shows an estimate of these 2000 RD&E employees by their national location.

Judging from the data in Exhibit A-5 and information obtained from the other automobile manufacturers, a strong correlation seems to exist between the size of a subsidiary's manufacturing operations and its R&D expenditures. Exhibit A-6 shows the size of Chrysler's operations in the U.S., France, and United Kingdom, and Spain, along with the percent of total operations each comprises.

Multiplying the derived percentages in Exhibit A-6 by the total non-customer sponsored research Exhibit A-1, and estimate is derived of the total R&D expenditures in each country (see Exhibit A-7).

In an interview with a Chrysler source, it was roughly determined that Chrysler Europe performed \$50-to-\$70 million in RD&E in 1976. (This range included the \$64.62 figure estimated in Exhibit A-7)¹. In the same interview, it was stated that only \$2 million (approximately) was spent on "basic" research abroad. The remainder was spent on projects with a time horizon of one to three years (i.e., product engineering, design and manufacturing).

¹In the interview, it was estimated that each R&D worker costs Chrysler between \$25,000 and \$35,000. With 2000 employees, this sums to \$50 million and \$70 million respectively.

²Ibid.

³Ibid.

Exhibit A-8 shows the R&D facilities in England and France. While some information was obtained on Chrysler's research efforts in England, similar information could not be obtained for France -- especially and most importantly for the Poissy operation. According to one source, Simca's R&D is carried out at the Poissy Engineering Center where "the River Seine acts as a moat to protect the new center from prying eyes."² So tight is the security at the Poissy plant that in 1971, only one distant aerial picture was known to be available.³

It should be noted that both Coventry, England and Poissy, France, Chrysler has manufacturing and assembly plants. This suggests that the R&D is closely tied to the actual manufacturing operations in those countries. This idea is reinforced by the fact that only \$2 million is spent on "basic" research in Europe. Also significant here is the fact that of its foreign operations (excluding Canada and Japan), France and England rank first and second respectively in total output and square footage owned by Chrysler.

Exhibit A-1

Chrysler Corporation

Total RD&E Expenditures and Professional

RD&E Employment

Year	\$	Professional	\$	Professional
	(millions) Total R &D	R&D Employees	(millions) Customer Sponsored R&D	R&D Employees
1976	280.4	2500	42.8	200
1975	199.0	2200	39.9	300
1974	239.0	2800	52.9	400
1973	247.0	3000	46.4	600
1972	190.5	2700	34.5	900
1971	146.5	2400	25.0	700

Source: Chrysler 10K report, 1976.

Exhibit A-2
Chrysler Corporation

Total RD&E Expenditures and Employment
as Percentage of Total Sales and Total
Employment

<u>Year</u>	<u>Total RD&E \$ as % of Total Sales</u>	<u>Professional R&D Employees as % of Total Employees</u>
1976	1.8	1.02
1975	1.7	1.01
1974	2.1	1.09
1973	2.1	1.20
1972	2.0	1.10

Source: 10K Report, 1976.

Exhibit A-3
Chrysler Corporation
Engineering and Research Facilities -
000s Square Feet
 (%)

<u>Year</u>	<u>World Total</u>	<u>U.S. Total</u>	<u>Foreign Total</u>
1976	3518	2429	1089
	(100)	(69)	(31)
1975	3514	2414	1100
	(100)	(70)	(30)
1974	3470	2414	1053
	(100)	(70)	(30)
1973	3462	2329	1133
	(100)	(70)	(30)
1972	3344	2293	1051
	(100)	(69)	(31)

*Principal engineering and research facilities in Highland Park, Michigan.

Source: 10K report, 1976.

Exhibit A-4
Chrysler Corporation
Engineering and Research Facilities as Percentage
of Total Facilities

Year	U.S. Engineering and Research As a % of Total U.S. Facilities' Space	Foreign Engineering and Research As a % of Total Foreign Facilities' Space
1976	3.64	2.63
1975	3.59	2.62
1974	3.63	2.53
1973	3.56	2.73
1972	3.54	2.49

Source: 10K Report for 1976.

Exhibit A-5
Chrysler Corporation
Location of RD&E Employees
in Europe

	<u>England</u>	<u>France</u>	<u>Spain</u>
Passenger Car R&D	850	850	0
Truck R&D	150	0	0
Truck and Tractor R&D	0	0	150

Source: Personal interviews.

Exhibit A-6
Chrysler Corporation

Unit Production Output of Selected Subsidiaries

	U.S.	%	France	%	U.K.	%	Spain	%
1976	66,652	72.8	10,600	11.6	9,900	10.8	4400	4.8
1975	67,133	73.0	10,503	11.4	10,000	10.9	4300	4.7
1974	66,553	72.8	10,400	11.4	10,100	11.1	4300	4.7
1973	65,372	72.3	10,300	11.4	10,500	11.6	4300	4.7
1972	64,807	72.5	10,200	11.4	10,100	11.3	4300	4.8

Source: Motor Vehicle Manufacturers Association,
World Motor Vehicle Data, Detroit, Mi., 1977.
Percentages calculated by consultant.

Exhibit A-7

Chrysler Corporation
Estimated RD&E Expenditures of the United States and

Selected Subsidiaries
(millions of \$)

	<u>U.S.</u>	<u>France</u>	<u>United Kingdom</u>	<u>Spain</u>
1976	172.97	27.56	25.66	11.40
1975	116.14	18.14	17.34	7.48
1974	135.48	21.21	20.66	8.75
1973	145.03	22.87	23.27	9.43
1972	113.1	17.78	17.63	7.49

Source: Consultants' calculations.

Exhibit A-8

Chrysler Corporation

Chrysler's Foreign Passenger Car RD&E Facilities

<u>Name and Location</u>	<u>Departments</u>	<u>Nature</u>
(1) Chrysler U.K. Whitley Technical Center Abbey Road Whitley Coventry CF3 4GB	Body Engineering-Car and Truck Chassis Engineering - cars Product Proving & International Engineering Truck Engineering Advanced Engineering Materials	Numerous special experimental techniques for general vehicle developments; equipment includes dynometers, exhaust emission testing facilities, cold test room, electronic and rig test apparatus. ¹
(2) Chrysler France Engineering Center Poissy, France		
(3) Chrysler France Mortefontaine, France		Large test ground, high speed circuits, used extensively by Chrysler U.K. ²

(1) Source: Industrial Research in Britain, 7th edition.

(2) Source: "Simca - Chrysler with French Dressing", Motor, June 19, 1971, pg. 24.

3.2 PRODUCTION ABROAD

Chrysler has manufacturing \$/or assembly plants in three general world locations -- Europe, Latin America, and the Far East and Africa. Its foreign subsidiaries operate from forty-three locations in nineteen countries (i.e., outside the United States and Canada.--See Exhibit B-1). These subsidiaries produce both passenger cars and commercial vehicles -- with particular emphasis on the production of passenger cars.

Chrysler's European operations are relatively new. Virtually all of its subsidiaries were acquired when Chrysler purchased Simca - Societe Industrielle de Meranique et Carrosseue Automobile -- in France (1958), Rootes Motors, Ltd. in the United Kingdom, Ireland and Scotland (1964) and Barrieros Ltd. in Spain. The operations in these three countries dwarf Chrysler's operations anywhere else in the world. While all three operations produce for both domestic and foreign markets, Chrysler's principal export facilities are in France and the United Kingdom. For the most part, these exports are channeled to other Common Market countries. Exhibit B-2 reflects the extent of these exports.

Production in Spain, Latin America and the Far East and Africa is predominantly intended to satisfy domestic demands.¹ In all cases, the size of the facilities in these countries is so small as to render insignificant any potential exportation that does take place. (See Exhibit B-3).

Chrysler's manufacturing facilities parallel its engineering and research facilities. Approximately two-thirds of its manufacturing facilities (in square feet) are in the U.S. while one-third is abroad. Assuming that Chrysler's manufacturing size bears a direct relation to the size of its operations in each country, estimates can be made for the size of the manufacturing operations. Exhibit B-3 shows the per cent of Chrysler's total properties (i.e., manufacturing facilities, car, truck and coach assembly facilities, parts depots, engineering and research facilities and warehouses, general offices and miscellaneous space) as distributed across the world. Exhibit B-4 shows the actual size of its manufacturing and assembly facilities between the U.S. and abroad. Finally, Exhibit B-5 applies the percentages in Exhibit B-3 and the square footage in Exhibit B-4 to arrive at the square footage of manufacturing and assembly plants in each country.

¹Chrysler's South African plant was expanded with the intention of having sufficient capacity to supply other African countries. However, data are unavailable to verify the extent of its export sales.

One can gain further appreciation for the size of Chrysler's European market by looking at Exhibit B-3 . Over 85% of Chrysler's facilities are located in the U.S., Canada or Europe. The European market is nearly four times the size of the Australian market and the Latin American (i.e. "other" market).

In Europe, Chrysler maintains nineteen manufacturing and/or assembly facilities in six countries. Exhibit B-6 shows the countries in which these facilities are located. Exhibit B-7 shows the size of the production in each country.

In Latin America, Chrysler operates nine manufacturing and/or assembly plants in six countries. Exhibit B-8 shows the countries in which these facilities are located. Exhibit B-9 shows the size of production in each country.

Finally, in the Far East and Africa, Chrysler maintains nine manufacturing and/or assembly facilities in six countries. Exhibit B-10 shows the location of these facilities. Exhibit B-11 shows the size of production in each country.

One final area of interest is the production capability that Chrysler gains through its connection to Mitsubishi Motors Corporation (MMC) in Japan. Exhibit B-11 shows that production by MMC is sizeable -- exceeding the

size of Chrysler's U.K. subsidiary. Currently, Chrysler has a 15% interest in MMC with an option to increase its interest to 35%.

Also, Chrysler has cultivated closer ties to the Japanese market.

- (1) In 1971, Chrysler Australia, Ltd. agreed to assemble the Japanese Colt Galant in return for the Australian-built Valiant being sold in Japan. This was significant because it was a first step by the Japanese in opening up their market to foreign competition.

This arrangement was part of the deal by which Chrysler was allowed to purchase 35% of MMC's stock.

- (2) Chrysler and Mitsubishi have also exchanged service tutors in an effort to improve the efficiency and understanding of Mitsubishi's and Chrysler's service and staff.¹

¹"Chrysler-Mitsubishi Swap Service Tutors", Automotive News, December 20, 1976, p. 12.

Exhibit B-1
Chrysler Corporation
Location and Purpose of
Production Operations Abroad

	<u>Country</u>	<u>City</u>	<u>Name</u>	<u>Purpose</u>	
				<u>Manufacturing</u>	<u>--Assembly</u>
1)	Argentina	Buenos Aires	Chrysler Fere Argentina-San Justo	x	x
2)	Argentina	Buenos Aires	Chrysler Fere Argentina-Monte Chingolo	x	x
3)	Australia	Adelaide	Chrysler Australia- Clovelly Park	x	x
4)	Australia	Adelaide	W.H. Wylie- Clovelly Park	x	
5)	Australia	Finsbury	Chrysler Australia	x	x
6)	Australia	Lonsdale	Chrysler Australia	x	
7)	Brazil	Sao Paulo	Chrysler Corp. do Brazil-Sao Bernardo do Campo	x	x
8)	Brazil	Sao Paulo	Chrysler Corp. do Brazil-Sao Bernardo do Campo	x	x
9)	Colombia	Bogata	Chrysler Colmotores		x
10)	England	Baginton	Chrysler United Kingdom	x	
11)	England	Birmingham	Chrysler U.K.- Hills Precision Die Casting	x	
12)	England	Coventry	Chrysler U.K.-Hills Precision Plastics	x	
13)	England	Coventry	Chrysler U.K.-Ryton		x
14)	England	Coventry	Chrysler U.K.-Stoke	x	
15)	England	Dunstable	Chrysler U.K.-Dunstable		x

Exhibit B-1 (continued)

	<u>Country</u>	<u>City</u>	<u>Name</u>	<u>Purpose</u>	
				<u>Manufacturing</u>	<u>--Assembly</u>
16)	England	Luton	Chrysler U.K.- Luton	x	
17)	England	Maidstone	Chrysler U.K.- Tilling-Stevens	x	
18)	France	Bondy	Chrysler France Foundries	x	
19)	France	Dompierre- sur-Loire	Chrysler France Foundries Sept-Fons	x	
20)	France	LaRoche	Chrysler France	x	
21)	France	Poissy	Chrysler France	x	x
22)	France	Sully-sur- Loire	Chrysler France Forges	x	
23)	France	Valencienne	Chrysler France	x	
24)	France	Vieux-Conde	Chrysler France	x	
25)	Ireland	Dublin	Chrysler Ireland		x
26)	Japan	Tokyo	Mitsubishi Motors Corporation (MMC)*		Headquarters
27)	Japan	Kawasaki	MMC-Tokyo Works- Kawasaki Plant	x	x
28)	Japan	Kyoto	MMC-Kyoto Works	x	
29)	Japan	Mizushima	MMC-Mizushima Works	x	x
30)	Japan	Nagoya	MMC-Nagoya Works	x	x
31)	Japan	Okazaki	MMC-Technical Center	x	
32)	Japan	Tokyo	MMC-Tokyo Works- Maruko Plant	x	x

*Associated Company-15% ownership.

Exhibit B-1 (continued)

	<u>Country</u>	<u>City</u>	<u>Name</u>	<u>Purpose</u>	
				<u>Manufacturing</u>	<u>--Assembly</u>
	Malta		Industrial Motors		x
33)	Mexico	Mexico City	Chrysler de Mexico		x
34)	Mexico	Toluca	Chrysler de Mexico	x	x
35)	Morocco	Casablanca	S.O.M.A.C.A.*		x
36)	Mozambique	Beira	Soc. de Agencias Ltda.		x
37)	Peru	Lima	Chrysler Peru		x
38)	Portugal	Lisbon	Representacoes Auto- moveis Chrysler S.A.R.L.		x
39)	Scotland	Linwood	Chrysler Scotland	x	x
40)	S. Africa, Republic of	Pretoria	Chrysler South Africa	x	x
41)	Spain	Madrid	Chrysler Espana	x	x
42)	Turkey	Istanbul	Chrysler Sanayi	x	x
43)	Venezuela	Valencia	Chrysler de Venezuela		x

*Associated Company-15% ownership.

Exhibit B-2
Chrysler Corporation
Common Market Registrations
of Vehicles Produced in France
and Great Britain

	<u>From France</u> ¹	<u>From Great Britain</u> ²
West Germany	54,512	184
Belgium and Luxembourg	24,442	1868
Denmark	8,823	2965
France	191,111	493
Great Britain and Ireland	23,184	59,721
Italy	66,441	370
Netherlands	38,225	1501
Total	406,738	66,658

Source: L'Argus de L'Automobile Et Locomotions

¹France also services Sweden, Portugal and Switzerland.

²Great Britain also services Portugal, Switzerland and Venezuela.

Exhibit B-3
Chrysler Corporation
International Facilities in Each Country
as Percent of Total Operations

	1976	1975	1974	1973	1972
U.S.	61.7	61.5	61.6	61.2	60.6
Australia	2.7	2.7	2.7	2.7	3.2
Canada	6.3	6.2	5.6	5.6	5.7
France } England } Spain }	23.0	22.7	22.8	23.4	23.0
Other	6.3	6.9	7.3	7.1	7.5

Source: 10K report for 1976.

Exhibit B-4
Chrysler Corporation
Manufacturing Facilities and Car, Truck,
and Coach Assembly Facilities

(000s of square feet)

	<u>In U.S.</u>		<u>Outside U.S.</u>	
	<u>Manufacturing</u>	<u>Assembly</u>	<u>Manufacturing</u>	<u>Assembly</u>
1976	31,517	19,686	16,134	13,615
1975	32,023	19,656	16,173	14,231
1974	31,083	19,401	16,330	13,598
1973	30,695	19,212	16,262	13,504
1972	29,973	18,765	16,319	13,467

Source: 10K report for 1976.

Exhibit B-5
Chrysler Corporation
Manufacturing Facilities by Country

(in 000s of square feet)

	<u>1976</u>	<u>1975</u>	<u>1974</u>	<u>1973</u>	<u>1972</u>
U.S.	31,517	32,023	31,023	30,695	29,973
Australia	1,137	1,134	1,119	1,132	1,325
Canada	2,654	2,604	2,321	2,347	2,361
France					
England	9,688	9,536	9,864	9,808	9,526
Spain					
Other	2,655	2,899	3,026	2,976	3,106

Source: Derived from Exhibit 3
and Exhibit 4.

Exhibit B-6
Chrysler Corporation
Manufacturing and Assembly Facilities
by Country, Europe

	<u>Manufacturing</u>	<u>Manufacturing and Assembly</u>	<u>Assembly</u>	<u>Total</u>
England	6	0	2	8
France	6	1	0	7
Ireland	0	0	1	1
Portugal	0	0	1	1
Scotland	0	1	0	1
Spain	0	1	0	1
	<hr/>	<hr/>	<hr/>	<hr/>
	12	3	4	19

Source: World Trade Department, Motor
Vehicles Manufacturers Assn.,
1974.

Exhibit B-7

Chrysler Corporation

Production by Country, Europe

	<u>1976</u>	<u>1975</u>	<u>1974</u>	<u>1973</u>	<u>1972</u>
England	104,174	135,010	201,049	289,087	264,693
France	506,295	424,601	412,137	546,779	494,019
Ireland	n/a	n/a	n/a	n/a	n/a
Portugal	2053	3296	964	n/a	n/a
Scotland	n/a	n/a	n/a	n/a	n/a
Spain	82,817	78,286	73,979	80,135	54,820

Source: World Motors Vehicle Data.

Exhibit B-8
Chrysler Corporation
Manufacturing and Assembly Facilities
by Country, Latin America

	<u>Manufacturing</u>	<u>Manufacturing and Assembly</u>	<u>Assembly</u>
Argentina	0	2	0
Brazil	0	2	0
Columbia	0	0	1
Mexico	0	1	1
Peru	0	0	1
Venezuela	0	0	1
	<hr/>	<hr/>	<hr/>
	0	5	4

Source: World Trade Department, Motor Vehicle Manufacturer's Assn.

Exhibit B-9
Chrysler Corporation
Production by Country, Latin America

	<u>1976</u>	<u>1975</u>	<u>1974</u>	<u>1973</u>	<u>1972</u>
Argentina	21,986	22,181	26,587	27,671	28,186
Brazil	27,831	24,472	31,526	36,841	18,043
Columbia	15,276	13,589	14,884	11,184	--
Mexico	56,642	65,032	62,839	47,864	38,267
Peru	11,031	10,603	10,201	9,897	9,897
Venezuela	43,355	37,763	28,570	21,805	18,846

Source: World Motor Vehicle Data and
Chrysler's 1976 Annual Report.

Exhibit B-10
Chrysler Corporation
Manufacturing and Assembly Facilities
by Country,¹ Far East and Africa

	<u>Manufacturing</u>	<u>Manufacturing and Assembly</u>	<u>Assembly</u>
Australia	2	2	0
New Zealand	0	0	1
South Africa	0	1	0
Turkey	0	1	0
Mozambique	0	0	1
Morocco	<u>0</u>	<u>0</u>	<u>1</u>
	2	4	3

Source: World Trade Department, Motor
Vehicle Manufacturer's Assn.

¹Chrysler South Africa (Pty) Ltd., was integrated with
Illings, Ltd., a South African automobile company.
The new corporation is called Sigma Motor Corporation
(Pty) Ltd. Chrysler has a 24.9% share in this company.

Exhibit B-11
Chrysler Corporation
Production by Country, Far East and Africa

	<u>1976</u>	<u>1975</u>	<u>1974</u>	<u>1973</u>	<u>1972</u>
Japan	647,623	550,238	495,518	571,832	444,332
Australia	41,500	44,000	49,000	50,000	44,000
New Zealand	n/a	n/a	n/a	n/a	n/a
South Africa	n/a	n/a	n/a	n/a	n/a
Turkey	n/a	n/a	n/a	n/a	n/a
Mozambique	5,037	n/a	n/a	n/a	n/a
Morocco	n/a	4,360	4,698	5,239	3,689

Source: World Motor Vehicle Data and
Chrysler's 1976 Annual Report.

3.3 SALES AND MARKETING ABROAD

In 1976, Chrysler's sales totaled \$15.5 billion. Of this, Chrysler earned \$11.1 billion in the U.S. and Canada (i.e., \$9.8 billion in the U.S. and \$1.3 billion in Canada) and the remaining \$4.4 billion abroad. While its foreign operations are small relative to General Motors' and Ford's foreign operations, they have expanded rather rapidly in the past two decades. Mexico and Canada, Chrysler's foreign sales increased over eight-fold between 1962 and 1971 -- from \$187 million to \$1.7 billion.¹

Chrysler's primary foreign markets are in Europe, Latin America and Australia. However, markets are presently being developed in Africa and the Far East. Of its total overseas sales, 75% are gained from its European operations and approximately 20% are gained from Australia and Latin America.²

Exhibit C-1 shows Chrysler's unit sales activities for 1976 and 1975. Of unit sales totaling 3,130,307 in 1976, 66.4% were sold in the U.S. and Canada while 36.6% were sold abroad. Outside the U.S. and Canada, 75.9% of Chrysler's unit sales were in Europe, 11.4% were in South America, 7% were in the Far East, and 6% were in other locations. Clearly,

¹"Chrysler and the World", Automotive Industries, July 1, 1971, p. 47.

²Information gained from personal interviews at Chrysler.

Chrysler's European operations dominate its overseas activities. This information is summarized in Exhibit C-2.

Of the worldwide sales cited in Exhibits C-1 and C-2 , certain countries maintain a majority of Chrysler's foreign market share. Exhibit C-3 shows the countries in which Chrysler sells the largest number of motor vehicles (i.e., cars and trucks) as well as their total foreign market share. Note that England, France and Spain comprise over 74% of Chrysler's sales abroad.

Further information can be derived from Exhibits C-1 through C-3 by showing the market share of these geographic locations accounted for by each major country. This information is summarized in Exhibit C-4 . The key messages of Exhibit C-4 are:

- a) France accounts for over 70% of Chrysler's total European sales;
- b) England, France and Spain total over 98% of all European sales;
- c) Mexico accounts for over 50% of the Latin American market; and,
- d) Australia accounts for over 77% of the Far Eastern and African markets.

Overall, Chrysler has marketing operations in nineteen countries outside the U.S. and Canada. Each of these marketing units services only its domestic market.¹ In Europe, however, the operations have been consolidated under Chrysler International S.A. -- a Swiss subsidiary which was set up to increase the foreign sales of U.S. produced vehicles.² Currently, all European marketing units report to Chrysler International S.A. which, in turn, reports to the U.S. parent company. Exhibit C-5 details the foreign countries in which Chrysler has subsidiaries with marketing units.

Some idea of the approximate size of Chrysler's overseas operations can be gained from the sales made in each of these countries. This information is summarized in Exhibit C-6. As expected, Western Europe dominates foreign sales with France, England, Spain and West Germany, holding the vast proportion of sales. In Latin America, Mexico and Venezuela hold majority portions of the market.

¹Mitsubishi Motors Corporation sells in the U.S., but has no marketing outlets there. Rather, Chrysler sells Mitsubishi products through its own marketing outlets.

²Chrysler International S.A. also services Latin America.

Exhibit C-1
Chrysler Corporation
Unit Sales by Geographic Location*

<u>Location</u>	<u>1976</u>	<u>1975</u>
U.S. and Canada	2,077,561	1,608,462
Outside the U.S. and Canada	985,267	911,927
Europe	747,668	660,435
South America	112,257	107,714
Far East and Africa	68,997	77,095

*includes passenger vehicles and trucks.

Source: Chrysler's Annual Report for 1976.

Exhibit C-2
Chrysler Corporation

Unit Sales Abroad by Geographic Location
and Percentage of Total Unit Sales Abroad

<u>Location</u>	<u>Units</u> <u>1976</u>	<u>%</u>	<u>Units</u> <u>1975</u>	<u>%</u>
Europe	747,668	75.9	660,435	72.4
South America	112,257	11.4	107,714	11.8
Far East and Africa	68,997	7.0	77,095	8.5
Other	<u>56,345</u>	<u>5.7</u>	<u>66,683</u>	<u>7.3</u>
Total Outside U.S. and Canada	985,267	100.	911,927	100.

Source: Chrysler's Annual Report for 1976.

Exhibit C-3
Chrysler Corporation
Unit Sales by Major Country and
Percentage of Total Unit Sales Abroad

<u>Country</u>	<u>1976</u>	<u>% of Foreign Sales</u>	<u>1975</u>	<u>% of Foreign Sales</u>
Australia	53,241	5.4%	54,156	5.9%
England	126,257	12.8	156,573	17.2
France	526,640	53.5	438,866	48.1
Mexico	56,345	5.7	63,273	6.9
Spain	81,931	8.3	78,029	8.6
Other	<u>140,853</u>	<u>14.3</u>	<u>121,032</u>	<u>13.3</u>
Total Outside the U.A. and Canada	985,241	100.	911,929	100.

Source: Chrysler's Annual Report for 1976.

Exhibit C-4
Chrysler Corporation
Country Unit Sales as Percentage
of Regional Unit Sales
% of Sales

	Europe	Latin Ameica	Africa and Far East
England	16.9		
France	70.4		
Spain	11.0		
Other Europe	1.7		
Mexico		50.2	
Other Latin American Countries		49.8	
Australia			77.2
Other African and Far East			22.8
	100.	100.	100.

Source: Chrysler's Annual Report for 1976.

Exhibit C-5

Chrysler Corporation

Location and Ownership of Sales Subsidiaries Abroad

<u>Country</u>	<u>Ownership Status</u>
1) Austria	Wholly-owned - part of Chrysler International S.A.
2) Belgium	Wholly-owned (76% by Chrysler, 24% by Chrysler France)
3) Denmark	Wholly-owned (part of Chrysler International S.A.)
4) France	99.6% owned
5) Germany, West	Wholly-owned (76% by Chrysler, 24% by Chrysler France)
6) Netherlands	" "
7) Norway	" " - part of Chrysler International S.A.
8) Spain	98.1% owned
9) Switzerland	Wholly-owned-part of Chrysler International S.A.
10) United Kingdom	Wholly-owned - part of Chrysler International S.A.
11) Australia	96.9% owned by Chrysler overseas Capital Corporation
12) South Africa	Wholly-owned part of Chrysler International S.A.
13) Turkey	60% owned by Chrysler International S.A.
14) Argentina	96.2% owned by Chrysler International S.A.
15) Columbia	77.4% owned by Chrysler International S.A.
16) Mexico	99.3% owned.

Exhibit C-5 (continued)

<u>Country</u>	<u>Ownership Status</u>
17) Panama	Wholly-owned - part of Chrysler International S.A.
18) Peru	83.2% owned by Chrysler International S.A.
19) Venezuela	Wholly-owned.
20) Canada	Wholly-owned.

Source: Chrysler's 10K Report for 1976.

Exhibit C-6
Chrysler Corporation
Unit Sales by Country

Country	Passenger Cars	Commercial Vehicles	Passenger Cars	Commercial Vehicles
Australia	n/a	n/a	n/a	n/a
South Africa	15,921	10,255	12,783	2,781
Turkey	n/a	n/a	n/a	n/a
Austria	n/a	n/a	n/a	n/a
Belgium	27,178	n/a	26,032	n/a
Denmark	11,835	655	8,848	808
France	191,111	12,506	132,396	10,460
Germany, W.	55,697	n/a	57,917	n/a
Netherlands	39,579	3,468	42,932	2,744
Norway	n/a	n/a	n/a	n/a
Spain	71,078	5,045	66,445	5,361
Switzerland	8,871	144	8,079	150
U.K.	82,905	20,132	95,436	13,441
Argentina	n/a	n/a	n/a	n/a
Columbia	n/a	n/a	n/a	n/a
Mexico	33,248	13,681	33,169	29,932
Panama	n/a	n/a	n/a	n/a
Peru	1,042	n/a	1,039	n/a
Venezuela	29,416	12,933	31,346	7,820

Source: World Motor Vehicle Data.

4. AMERICAN MOTORS CORPORATION

4.1 RESEARCH, DEVELOPMENT, AND ENGINEERING ABROAD

AMC does not perform any corporate sponsored RD&E activities abroad. All RD&E expenditures made public by AMC have been used to fund RD&E activities in the United States. These expenditures were:

\$38.5 million in 1976
\$36.5 million in 1975
\$35.3 million in 1974.

Approximately 90% of these expenditures are for engineering and design activities according to one source.

As far as non-consolidated activities are concerned, one AMC manager noted that affiliated production and assembly companies have performed significant RD&E work only in Mexico and Korea. In both instances, RD&E work was aimed expressly at respective local markets and did not have any application for AMC's U.S. operations (see Exhibit A-1). Also, minor RD&E work on AMC products was performed in Australia and South Africa, again to adapt the products to specific local environmental circumstances. (See Exhibit A-2 for a summary of RD&E work at these foreign locations.)

Exhibit A-1

American Motors Corporation

Location and Selected Variables of RD&F
Performed Abroad in 1977

<u>Location</u>	<u>Name</u>	<u>Purpose</u>	<u>User</u>	<u>Size</u>	<u>Nature</u>
(1) Mexico	Vehiculos Automotors Mexicanos, S.A. (affiliated company)	Work designed to adopt engines to Mexican pollution requirements.	VAM (only) (no use outside Mexico)	n.a.	-support of existing business. -commercialized in less than three years.
(2) Korea	Shinjin Jeep Company Ltd. (affiliated company)	To develop a unique product for Korean market (not according to U.S. standards)	local company only	n.a.	-support of existing business. -commercialized in less than three years.

Source: Company interviews.

Exhibit A-2

American Motors Corporation

Types of RD&E Projects Performed Abroad

<u>Location</u>	<u>Type of Project</u>
Mexico:	VAM: engineering work to adapt AMC engines to local pollution control requirements. No application in U.S. (started 1971, "ITU" unit), located at assembly plant.
Korea:	to build and develop a unique "Jeep" for Korea that basically violates U.S. standards. No application for U.S. market.
Australia:	strict seat belt regulations required some special engineering by licensee. No application to U.S. (non-affiliated company).
South Africa:	develop right hand drive for vehicles. No application for U.S. (non-affiliated company).

Source: Company interviews.

4.2 PRODUCTION ABROAD

AMC does not have any majority owned plants abroad. The company maintains a few affiliated companies; however, only two affiliates assemble AMC products exclusively (Mexico and Venezuela). Five affiliated companies assemble and/or manufacture AMC products under license with interests in other passenger car lines as well (Argentina, Costa Rica, India, Korea, Venezuela). Also, AMC maintains licensing agreements in Spain and Japan where Jeep products are produced with 100% local content. In other locations abroad, AMC's production activities are carried out by independent dealer/assemblers with small volumes.

Exhibit B-1

American Motors Corporation

Location and Type of Manufacturing Activities Abroad

<u>Location</u>	<u>Name</u>	<u>Purpose</u>	<u>User</u>	<u>Size</u>
(1) Argentina, Cordoba	IKA-Renault S.A. Argentina S.A.	Manufacturing and Assembly (licensing)	AMC Jeep	(1976) -0-units (1975) 164 units (1976) total output 30,896 units
(2) Australia, Melbourne	Australian Motor Industries, Ltd.	Manufacturing and Assembly (indept. licen- sor)	Inactive for AMC/Jeep	(1976) total other output 40,201 units
(3) Colombia, Bogata	Leomidas Lara e Hijos	Assembly (independent licensor)	Jeep	
(4) Costa Rica, San Jose	Ensambladora Centroamericana S.A.	Assembly (independent licensor)	AMC	
(5) Costa Rica, San Jose	Auto Technica S.A.	Assembly (affiliated company)	Jeep	
(6) India, Bombay	Mahindra & Mahindra Ltd.	Manufacturing (affiliated company)	Jeep	total output (1976) 8,079

Exhibit B-1 American Motors Corporation

<u>Location</u>	<u>Name</u>	<u>Purpose</u>	<u>User</u>	<u>Size</u>
(7) Indonesia, Jakarta	N.V. Jaharta Motor Co.	Assembly (indep. distributor/assembler)	Jeep	
(8) Irani, Theheran	Sherkate Sahami Jeep	Assembly (independent distributor/assembler)	AMC Jeep	
(9) Israeli, Haifa	Matmar Industries Ltd.	Assembly (independent dealer/assembler)	Jeep	
(10) Japan, Tokyo	Mitsubishi Heny Industries, Ltd. Motor Vehicles Div.	Manufacturing (100% local content) independent licensee	Jeep	total output passenger cars 1976 402,844
(11) Korea, Seorl	Shin Jin Motor Co., Ltd.	Manufacturing (affiliated company)	Jeep	
(12) Malaysia, Kuala Lumpur	Asia Motor Co.	Manufacturing and assembly	Jeep	
(13) Mexico, Mexico City	Vehiculos Automotrices Mexicanos, S.A. de C.V.	Manufacturing assembly (affiliated company)	AMC Jeep	(1976) - 22,047 units (1976) - 3099 units (1976) - 197 units
(14) Morocco, Casa Blanca	Societe d'Importation et de Distribution Automobile	Assembly (independent distributor/assembler)	Jeep	(1976) - 197 units

Exhibit B-1American Motors Corporation

<u>Location</u>	<u>Name</u>	<u>Purpose</u>	<u>User</u>	<u>Size</u>
(15) Pakistani, Karuchi	Naya Daur Motors Ltd.	Assembly (independent dealer/assembler)	Jeep	
(16) Philippines, Manila	Jeep Philippines, Inc.	Assembly (independent dealer/assembler)	Jeep	
(17) Portugal, Lisbon	C. Santos Comercio Industria, S.A.R.L.	Assembly (independent dealer/assembler)	Jeep	
(18) South Africa, Vitenhaze	Volhsuagen of South Africa (Pty) Limited	Assembly (indep. licensee)	Jeep	
(19) Spain, Zaragoza	Construcciones y Auxiliar de Ferrocarriles, S.A. V.I.A.S.A. Div.	Manufacturing (100% local content indep. licensee)	Jeep	(1976) total output 3 335 units
(20) Sri Lanka, Colombo	United Motors (now run by Govtm. of Sri Lanka)	Assembly (independent distributor/assembler)	Jeep	
(21) Taiwan, Taipei	Yue Loong Motor Co., Ltd.	Assembly	Jeep	

Exhibit B-1American Motors Corporation

<u>Location</u>	<u>Name</u>	<u>Purpose</u>	<u>User</u>	<u>Size</u>
(22) Thailand, Bangkok	Thai Yarnyon Co., Ltd.	Assembly (independent distributor/assembler)	Jeep	
(23) Turkey, Istanbul	Genoto General Otomotive Sanayi Ticaret Anonim Sirketi	Manufacturing and re assembly	Jeep	
(24) Turkey, Istanbul	Turkish Republic Land Forced Command (military only)	Manufacturing	Jeep	
(25) Uruguay, Montevideo				
(26) Venezuela, Mariara	Constructora Venezulana	Assembly	AMC	(1975) 1259 units (1975) total output 7237
(27) Venezuela, Tejerias Edo Aragua	Jeep de Venezuela S.A.	Assembly (fully owned subsidiary of AMC)	Jeep	(1975) 4537 units
(28) Bangladesh, Chittagong	Pragoti Industries, Ltd.	Assembly (independent dealer/assembler)	Jeep	

Source: -Company interviews.

-Motor Vehicle Manufacturers Association, World Motor Vehicle Data, Detroit, Mi., 1977.

-Motor Vehicle Manufacturers Association, Motor Vehicle Manufacturing and Assembly Plants of U.S. Manufacturers in Foreign Countries Excluding Canada, Detroit, Mi., January, 1974.

4.3 SALES AND MARKETING ABROAD

AMC presently maintains only one fully-owned marketing unit abroad (Jeep Venezuela S.A.). However, affiliated companies can be considered marketing units in a large sense. (See Exhibit C-1).

By and large, AMC depends on independent distributors in each country for its marketing activities. At the end of 1977, AMC products were sold in more than 100 countries.

Exhibit C-1

American Motors Corporation

Location and Purpose of Sales/Marketing Operations

Abroad in 1977

<u>Location</u>	<u>Name</u>	<u>Purpose</u>
(1) Argentina	IKA - Renault S.A. Argentina S.A.	Marketing of locally assembled AMC passenger cars and Jeeps (affiliated company).
(2) Australia	Willys Motors (Australia) Pty., Ltd.	Inactive subsidiary.
(3) Costa Rica	Auto Technica S.A.	Marketing of locally assembled Jeeps (affiliated company).
(4) Costa Rica	Financiera de America S.A.	Unknown (affiliated company)
(5) India	Mahindra & Mahindra	Marketing of locally manufactured Jeeps (affiliated company).
(6) Korea	Shin Tin Motor Co., Ltd.	Marketing of locally manufactured Jeeps (affiliated company).
(7) Mexico	Vehiculos Automotores Mexicanos, S.A. de C.V.	Marketing of locally manufactured and assembled AMC cars and Jeeps (affiliated company)
(8) Venezuela	Constructura Venezulana de Vehiculos, C.A.	Marketing of locally assembled AMCs (affiliated company, inactive since 1977).
(9) Venezuela	Jeep de Venezuela S.A.	Marketing of locally assembled Jeeps (owned subsidiary of AMC wholly).

Exhibit C-1 (continued) American Motors Corporation

<u>Location</u>	<u>Name</u>	<u>Purpose</u>
(10) Venezuela	Jeep Caracas	Unknown (affiliated company).

Numerous independent distributors and dealers in many countries.
But these organizations are not considered "AMC" organization units.

Source: Company interviews.
American Motors Corporation Annual Report, 1976.

PART TWO

AGGREGATED DATA ON THE MULTINATIONAL
DIFFUSION OF PRODUCTION AND SALES
OPERATIONS OF THE GENERAL MOTORS
CORPORATION, FORD MOTOR COMPANY,
AND CHRYSLER CORPORATION.

In Part Two, the data come from the databank of the Harvard Business School's Multinational Enterprise Project. Special programs were written to access the data for General Motors, Ford, and Chrysler Corporation and to format the data for variables related to principal activity, location, size, ownership, markets, etc.

AMC is omitted since its multinational diffusion is considerably limited, especially relative to the other three U.S. automotive producers.

In every exhibit, the data represent the number of foreign subsidiaries for various variables. For example, Exhibit 1 of Part Two shows the number of foreign subsidiaries "alive" (still operating) in 1976 for several different activities (manufacturing, sales, etc.)

The term "latest" refers to 1976.

The term "at entry" refers to when subsidiaries joined their respective multinational systems.

The term "existed" refers to when subsidiaries left the multinational system.

The term "other" refers generally to non-manufacturing and non-sales subsidiaries that are essentially financial subsidiaries or subsidiaries established for parts distribution and warehousing.

The term "unknown" refers mainly to extremely small sales subsidiaries with sales of less than \$1 million, according to the Harvard Project's data coordinator.

Finally, please note that subsidiaries under the R&D category register zero in all exhibits of Part Two. The zero result means no subsidiary has been created or acquired abroad whose sole or primary purpose is to perform research and development. This conforms with our findings discussed in the Report on the Evaluation of R&D Abroad (Report #2). Separate subsidiaries have not been formed by the major U.S. automotive producer, though U.S. multinationals in other industries have created them, for R&D purposes. However, other data from our research and the HBS databank show R&D has been performed abroad within (and secondary to) subsidiaries established primarily for manufacturing purposes.

Exhibit 1

ACTIVITY:	MANUFAC	-R & D-	-SALES-	OTHER	UNKNOWN	-TOTAL-
TOTAL AT ENTRY (1)	168	0	149	26	29	372
TOTAL AT LATEST(2)	124	0	106	43	99	372
EXITED (3)	12	0	10	2	55	79

(1) When foreign subsidiary joined or "entered" its respective multinational system.
 (2) 1976.

(3) number of foreign subsidiaries leaving the multinational system by divestment or legal consolidation with other subsidiaries.

Exhibit 1
Total Subsidiaries by Principal Activity
at Entry and in 1976.

Exhibit 2

ACTIVITY:	MANUFAC	R & D	SALES	OTHER	UNKNOWN	TOTAL
ENTRY YEAR						
1901	0	0	0	0	0	0
1902	0	0	0	0	0	0
1903	0	0	0	0	0	0
1904	0	0	1	0	0	1
1905	0	0	0	0	0	0
1906	0	0	0	0	0	0
1907	0	0	0	0	0	0
1908	0	0	0	0	0	0
1909	1	0	0	0	0	1
1910	0	0	0	0	0	0
1911	2	0	1	0	0	3
1912	1	0	0	0	0	1
1913	0	0	1	0	0	1
1914	0	0	0	0	0	0
1915	0	0	0	0	0	0
1916	1	0	0	0	0	1
1917	0	0	1	0	0	1
1918	2	0	0	1	0	3
1919	1	0	0	0	0	1
1920	2	0	0	0	0	2
1921	0	0	0	0	0	0
1922	2	0	1	0	0	3
1923	2	0	3	1	1	7
1924	2	0	10	0	0	12
1925	12	0	2	2	1	17
1926	4	0	5	0	0	9
1927	5	0	0	0	0	5
1928	1	0	0	0	1	2
1929	1	0	1	1	0	3
1930	1	0	3	0	0	4
1931	2	0	1	0	0	3
1932	0	0	2	0	0	2
1933	0	0	0	0	0	0
1934	1	0	0	0	0	1
1935	3	0	4	0	1	8
1936	1	0	0	0	0	1
1937	0	0	1	0	1	2
1938	1	0	2	0	0	3
1939	0	0	0	0	0	0

Exhibit 2

Year of Entry vs. Activity
at Entry

Exhibit 2
continued

ACTIVITY: ENTRY YEAR	MANUFAC	R & D	SALES	OTHER	UNKNOWN	TOTAL
1940	0	0	0	0	0	0
1941	0	0	2	0	2	4
1942	0	0	0	0	0	0
1943	0	0	0	0	0	0
1944	0	0	1	0	0	1
1945	0	0	2	0	0	2
1946	0	0	0	0	0	0
1947	0	0	0	0	2	2
1948	1	0	0	2	2	5
1949	1	0	0	0	0	1
1950	4	0	1	0	0	5
1951	1	0	0	0	0	1
1952	0	0	1	0	0	1
1953	1	0	0	0	0	1
1954	1	0	1	0	0	2
1955	1	0	0	0	0	1
1956	0	0	0	0	0	0
1957	0	0	0	0	0	0
1958	9	0	5	1	0	15
1959	9	0	2	0	1	8
1960	2	0	6	0	0	8
1961	7	0	1	1	0	9
1962	1	0	0	1	0	2
1963	4	0	3	0	2	9
1964	5	0	0	1	0	6
1965	7	0	2	0	0	9
1966	1	0	1	0	1	3
1967	17	0	17	4	3	41
1968	7	0	8	1	0	16
1969	5	0	9	1	0	15
1970	9	0	7	3	0	19
1971	5	0	8	1	0	14
1972	8	0	4	0	0	12
1973	5	0	4	0	0	9
1974	1	0	7	1	0	9
1975	5	0	0	0	0	5
1976	0	0	0	0	0	0
1977	0	0	0	0	0	0
Unknown:Entry	7	0	18	4	11	40
Dates						
TOTAL	168	0	149	26	29	372

YEAR:	1960	1970	1976
CODE	COUNTRY		
1	INTERNATIONAL (	0	0
1	22-(OLD) ASIA A	0	0
1	22-(OLD) EUROPE	0	0
1	22-(OLD) WESTER	0	0
101	AUSTRALIA	6	14
102	CANADA	26	33
103	NEW ZEALAND	3	3
104	INDONESIA	2	2
105	ST. PIERRE AND	0	0
106	SOUTH AFRICA	4	8
107	SOUTH WEST AFRI	0	0
108	UNITED STATES	17	24
109	ANTIGUA	0	0
200	CENTRAL AMERICA	0	0
200	27-(OLD) BRITTS	0	0
202	BARBADOS	0	0
203	BARBADOS	0	0
204	BERMUDA	1	2
205	BELIZE (BRITISH	0	0
205	BRITISH HONDURA	0	0
206	CAROL ZONE (PAN	0	0
207	COSTA RICA	0	0
208	CUBA	0	0
209	DOMINICA	0	0
210	DOMINICAN REPUB	0	0
211	EL SALVADOR	0	0
212	GRANADA	0	0
213	GUATELPE	0	0
214	GUATEMALA	0	0
215	HAITI	0	0
216	HONDURAS	0	0
217	JAMAICA	1	1
218	PAPYDUF	0	0
219	NETICO	5	10
220	NETIC (NETHEPIA	0	2
220	NETIC (NETHERLA	0	0
220	NETIC (NETHERS (DU	0	0
220	NETIC (NETHERS (DU	0	0
221	NICARAGUA	0	0

Exhibit 3

Subsidiaries Still Active
in 1960, 1970, 1976

Exhibit 3 continued

CODE	COUNTRY	1960	1970	1976
222	PANAMA	0	1	1
223	PUERTO RICO	0	0	0
224	ST. KITTS-NEVIS	0	0	0
225	ST. LUCIA	0	0	0
226	ST. VINCENT	0	0	0
227	TRINIDAD AND TO	0	0	0
228	VIKING ISLANDS	0	0	0
300	LATIN AMERICA (	0	0	0
301	BOLIVIA	0	0	0
302	CHILE	0	2	1
303	COLOMBIA	0	4	6
304	ECUADOR	0	0	0
305	PERU	2	1	4
306	ARGENTINA	4	10	9
307	BRAZIL	3	11	13
308	FRANCIS GUYANA	0	0	0
309	BRITISH GUYANA	0	0	0
309	DUTCH GUYANA	0	0	0
309	GUAYANA BRITISH	0	0	0
309	GUAYANA DUTCH	0	0	0
310	PARAGUAY	0	0	0
311	DUTCH GUYANA (S	0	0	0
311	SURINAM (DUTCH	0	0	0
312	PARAGUAY	2	2	3
313	YEMEN ARAB	4	0	7
401	BERMUDA	3	0	5
402	FAI CP	15	17	20
403	GERMANY (WEST)	11	10	13
404	JAPAN	3	10	6
405	FRANCE	0	1	1
406	NETHERLANDS	3	3	4
407	FRANCE	4	0	6
408	IRELAND	2	4	5
409	NETHERLANDS	21	32	36
410	AUSTRIA	2	3	3
411	GREECE	0	0	0
412	IRELAND	2	2	2
413	GREECE	0	0	0
414	IRELAND	0	0	0
415	LIECHTENSTEIN	0	0	0

Exhibit 3 continued

CODE	COUNTRY	1960	1970	1976
416	ALIA	0	0	0
417	ANDACO	0	0	0
418	AURRAY	1	3	3
419	PORTUGAL	1	2	1
420	SPAIN	0	5	5
421	SWEDEN	4	4	5
422	SATZEFIELD	4	7	7
501	ALBANIA	0	0	0
502	ANDORRA	0	0	0
503	BULGARIA	0	0	0
504	CZECHOSLOVAKIA	0	0	0
505	GERMANY (EAST)	0	0	0
506	GIFALTAR	0	0	0
507	HUNGARY	0	0	0
508	POLAND	0	0	0
509	RUMANIA	0	0	0
510	SARAHINO	0	0	0
511	USSR (RUSSIA)	0	0	0
512	YUGOSLAVIA	0	0	0
601	ALGERIA	0	1	1
602	IRAQ	0	0	1
603	IRAQ	0	0	0
604	KUWAIT	0	0	0
605	LIBYA	0	0	0
606	QATAR	0	0	0
607	SAUDI ARABIA	0	0	1
608	SYRIA	0	0	0
609	TRUCIAL STATES	0	0	0
610	KHAFAN	0	0	0
611	CHAD	0	0	0
612	NUFAR	0	0	0
613	EGYPT	0	0	0
614	ISRAEL	0	0	0
615	JORDAN	0	0	0
616	LEBANON	0	0	0
617	MALI	0	0	0
618	LIBYANS	0	0	0
619	MOROCCO	1	1	1
620	MUSCAT AND OMAN	0	0	0
621	NETHER	0	0	0

Exhibit 3 continued

CODE	COUNTRY	1966	1970	1976
622	SOMALI REPUBLIC	0	0	0
623	ADEN (SOUTHERN)	0	0	0
623	SOUTHEN. YEMEN	0	0	0
624	SIARISM NORTH A	0	0	0
625	SUDAN	0	0	0
626	TUNISIA	0	1	1
627	TURKEY	0	1	1
628	EGYPT UNITED A	1	1	1
629	UNITED ARAB REP	0	0	0
629	YEMEN	0	0	0
701	AFGHANISTAN	0	0	0
702	CEYLON	0	0	0
703	INDIA	0	0	1
704	MALDIVI ISLAND	0	0	0
705	NEPAL	0	0	0
706	PAKISTAN	1	0	0
707	SEICHELLES	0	0	0
708	SINKH	0	0	0
709	TAJIKHSH	0	0	0
800	AFRICA (N.F.S.)	0	0	0
800	ZZ=CODE: CPNTR	0	0	0
800	ZZ=CODE: EAST A	0	0	0
800	ZZ=CODE: NORTH	0	0	0
800	ZZ=CODE: WEST A	0	0	0
801	AFRICA ALP ISSAS	0	0	0
801	AFRICA SOMALIA	0	0	0
802	ANGOLA	0	0	0
803	BURUNDI	0	0	0
804	IBORUNDI	0	0	0
805	CAMEROON	0	0	0
805	CAPE VERDE ISLA	0	0	0
807	CELEP AFRICAN	0	0	0
804	COMORO ISLANDS	0	0	0
805	CONGO, FRENCH	0	0	0
809	CPA, CONGO (BRA	0	0	0
810	CAVERDE	0	0	0
811	GUINEA BISSAU	0	0	0
817	GUINEA	0	0	0
813	GAMBIA	0	0	0
814	GAMBIA	0	0	0

Exhibit 3 continued

YEAR:	1960	1970	1976
CODE COUNTRY			
815 CHINA	0	0	0
816 GUINEA	0	0	0
817 IVORY COAST	0	0	0
818 KENYA	1	1	0
819 LESOTHO	0	0	0
820 LIBERIA	0	0	0
821 MALAGASY REPUBLIC	0	0	0
822 MALAWI	0	0	0
823 MARSHALL ISLANDS	0	0	0
824 MAZAMBIQUE	1	1	1
825 NIGERIA	0	0	0
826 PORTUGUESE GUINEA	0	0	0
827 REUNION	0	0	0
828 RUANDA	0	0	0
829 SAU TOPE AND PR	0	0	0
830 SENEGAL	0	0	0
831 SIERRA LEONE	0	0	0
832 SRI LANKA	0	0	0
833 TANZANIA	0	0	0
834 TOGO	0	0	0
835 UGANDA	0	0	0
836 UPPER VOLTA	0	0	0
837 ZAMBIA	0	0	0
838 ZANZIBAR, BELUTAN	1	1	2
839 ZANZIBAR (ZAI)	0	0	0
840 ZANZIBAR (REP. OF)	0	0	0
841 MADAGASCAR	0	0	0
901 AMERICAN SAMOA	0	0	0
902 BRITISH SOLOMON	0	0	0
903 BRUNEI	0	0	0
904 BURMA	0	0	0
905 CAMBODIA	0	0	0
906 CHINA (HAINAN)	0	0	0
907 CHINA (TAIWAN)	0	0	1
908 CHINA (HONG KONG)	0	0	0
909 FIJI	0	0	0
910 FRENCH POLYNESIA	0	0	0
911 GUAM	0	0	0
912 HONG KONG	0	0	0
913 INDONESIA (2ND)	0	0	0

Exhibit 3 continued

CODE	COUNTRY	YEAR:	1960	1970	1976
912	INDONESIA (IST)		0	0	0
913	JAPAN		2	4	7
914	KOREA (NORTH)		0	0	0
915	KOREA (SOUTH)		0	0	1
916	LAOS		0	0	0
917	MACAU		0	0	0
918	MALAYSIA		0	0	1
919	MONGOLIA		0	0	0
920	NETHERLANDS		0	0	0
921	NEW GUINEA AND		0	0	0
922	NORWAY		0	0	0
923	PHILIPPINES		0	2	3
924	PORTUGUESE TIMOR		0	0	0
925	RUSSIAN ISLANDS		0	0	0
926	SINGAPORE		1	2	4
927	THAILAND		0	1	3
928	TONGA		0	0	0
929	VIETNAM (NORTH)		0	0	0
930	VIETNAM (SOUTH)		0	0	0
931	WESTERN SAMOA		0	0	0
	TOTAL		169	275	296

FINANCIAL STATISTICS AT LATEST

ACTIVITY:	MANUFAC	R & D	SALES	OTHER	UNKNOWN	TOTAL	EXITED
-SALES-							
< \$1 MILL	3	0	16	5	0	24	0
\$1M-\$10M	16	0	11	1	0	28	1
\$10M-\$25M	14	0	7	0	0	21	0
\$25M-\$100M	18	0	17	1	0	36	0
> \$100MILL	43	0	7	2	1	53	1
UNKNOWN	30	0	48	34	98	210	77
TOTAL	124	0	106	43	99	372	0
EXITED	12	0	10	2	55	84	79
-ASSETS-							
< \$1 MILL	4	0	15	10	0	29	2
\$1M-\$10M	21	0	19	1	0	41	0
\$10M-\$25M	18	0	11	2	0	31	0
\$25M-\$100M	22	0	12	0	0	34	0
> \$100MILL	27	0	1	2	1	31	1
UNKNOWN	32	0	48	28	98	206	76
TOTAL	124	0	106	43	99	372	0
EXITED	12	0	10	2	55	84	79
-EQUITY-							
< \$1 MILL	22	0	32	12	0	66	2
\$1M-\$10M	30	0	27	2	0	59	1
\$10M-\$25M	13	0	8	2	1	24	1
\$25M-\$100M	12	0	1	1	0	14	0
> \$100MILL	12	0	0	2	0	14	0
UNKNOWN	35	0	38	24	98	195	75
TOTAL	124	0	106	43	99	372	0
EXITED	12	0	10	2	55	84	79

Exhibit 4
Financial
Statistics
in 1976

Exhibit 5

Finance Category of Subsidiary by Country
of Incorporation

CODE	COUNTRY	LT \$1M	(Sales)				GT \$100M	UNKNOWN	TOTAL
			\$1M-\$10M	\$10M-\$25M	\$25M-\$100M	\$10M-\$100M			
1	INTERNATIONAL (	0	0	0	0	0	0	0
1	22-(OLD) ASIA A	0	0	0	0	0	0	0	
1	22-(OLD) EUROPE	0	0	0	0	0	0	0	
1	22-(OLD) WESTER	0	0	0	0	0	0	0	
101	AUSTRALIA	1	2	1	0	3	10	17	
102	CANADA	2	3	1	1	5	31	44	
103	NEW ZEALAND	0	0	1	1	1	2	4	
104	RHODESIA	0	0	0	0	0	3	3	
105	ST. PIERRE AND	0	0	0	0	0	0	0	
106	SOUTH AFRICA	0	0	0	1	2	8	11	
107	SOUTH WEST AFRI	0	0	0	0	0	0	0	
108	UNITED STATES	0	0	1	0	2	21	24	
109	ANTIGUA	0	0	0	0	0	0	0	
200	CENTRAL AMERICA	0	0	0	0	0	0	0	
200	22-(OLD) BRITTS	0	0	0	0	0	0	0	
202	BAHAMAS	0	0	0	0	0	0	0	
203	BARBADOS	0	0	0	0	0	0	0	
204	HERMUDA	0	0	0	0	0	2	2	
205	BELIZE (BRITISH	0	0	0	0	0	0	0	
205	BRITISH HONDURA	0	0	0	0	0	0	0	
206	CANAL ZONE (PAN	0	0	0	0	0	0	0	
207	COSTA RICA	0	0	0	0	0	0	0	
208	CUHA	0	0	0	0	0	1	1	
209	DOMINICA	0	0	0	0	0	0	0	
210	DOMINICAN REPUB	0	0	0	0	0	0	0	
211	EL SALVADOR	0	0	0	0	0	0	0	
212	GRENADA	0	0	0	0	0	0	0	
213	GUADFLOPE	0	0	0	0	0	0	0	
214	GUATEMALA	0	0	0	0	0	0	0	
215	HAITI	0	0	0	0	0	0	0	
216	HONDURAS	0	0	0	0	0	0	0	
217	JAMAICA	0	0	0	0	0	1	1	
218	MARTINIQUE	0	0	0	0	0	0	0	
219	MEXICO	2	1	2	0	3	4	12	

Exhibit 5 continued

CODE	COUNTRY	LT \$1M	Sales (\$M-\$10M)	FINANCE CATEGORY				GT \$100M	UNKNOWN	TOTAL
				\$10M-\$25M	\$25M-\$100M	\$100M-\$250M	\$250M-\$1000M			
220	DUTCH (NETHERLA	1	1	0	0	0	0	0	0	2
220	DUTCH (NETHERLA	0	0	0	0	0	0	0	0	0
220	NETHERLANDS (DU	0	0	0	0	0	0	0	0	0
220	NETHERLANDS (DU	0	0	0	0	0	0	0	0	0
221	NICARAGUA	0	0	0	0	0	0	0	0	0
222	PANAMA	1	0	0	0	0	0	0	0	1
223	PUERTO RICO	0	0	0	0	0	0	0	0	0
224	ST. KITTS-NEVIS	0	0	0	0	0	0	0	0	0
225	ST. LUCIA	0	0	0	0	0	0	0	0	0
226	ST. VINCENT	0	0	0	0	0	0	0	0	0
227	TRINIDAD AND TO	0	0	0	0	0	0	0	0	0
228	VIRGIN ISLANDS	0	0	0	0	0	0	0	0	0
300	LATIN AMERICA (	0	0	0	0	0	0	0	0	0
301	BOLIVIA	0	0	0	0	0	0	0	0	0
302	CHILE	0	1	0	0	0	0	0	2	3
303	COLOMBIA	1	1	0	3	0	0	0	1	6
304	ECUADOR	0	0	0	0	0	0	0	0	0
305	PERU	0	0	0	1	0	0	0	3	4
306	ARGENTINA	1	1	1	0	3	0	0	4	10
307	BRAZIL	1	0	1	1	3	0	0	7	13
308	FRENCH GUIANA	0	0	0	0	0	0	0	0	0
309	BRITISH GUYANA	0	0	0	0	0	0	0	0	0
309	BRITISH GUYANA	0	0	0	0	0	0	0	0	0
309	GUYANA (BRITISH	0	0	0	0	0	0	0	0	0
309	GUYANA (BRITISH	0	0	0	0	0	0	0	0	0
310	PARAGUAY	0	0	0	0	0	0	0	0	0
311	DUTCH GUIANA (S	0	0	0	0	0	0	0	0	0
311	SURINAM (DUTCH	0	0	0	0	0	0	0	0	0
312	URUGUAY	1	1	0	0	0	0	1	1	3
313	VENEZUELA	0	2	0	0	0	3	2	7	7
401	BELGIUM	0	1	0	0	0	3	1	5	5
402	FRANCE	1	2	0	2	0	6	11	22	22
403	GERMANY (WEST,	2	0	1	0	0	2	11	16	16
404	ITALY	3	0	0	0	1	1	6	11	11
405	LUXEMBOURG	0	0	0	0	0	0	1	1	1

Exhibit 5 continued

CODE	COUNTRY	(Sales) FINANCE CATEGORY										TOTAL
		LT \$1M	\$1M-\$10M	\$10M-\$25M	\$25M-\$100M	GT \$100M	UNKNOWN					
406	NETHERLANDS	0	0	0	0	2	2	0	0	0	4	
407	DENMARK	0	0	2	2	0	0	0	0	0	6	
408	IRELAND	0	0	3	1	0	2	0	0	0	6	
409	UNITED KINGDOM	2	2	1	5	5	35	0	0	50		
410	AUSTRIA	1	0	0	2	0	1	0	0	4		
411	CYPRUS	0	0	0	0	0	0	0	0	0		
412	FINLAND	0	0	0	2	0	0	0	0	2		
413	GREECE	0	0	0	0	0	2	0	0	2		
414	ICELAND	0	0	0	0	0	0	0	0	0		
415	LIECHTENSTEIN	0	0	0	0	0	0	0	0	0		
416	MALTA	0	0	0	0	0	0	0	0	0		
417	MONACO	0	0	0	0	0	0	0	0	0		
418	NORWAY	0	0	1	2	0	0	0	0	3		
419	PORTUGAL	0	0	0	1	0	1	0	0	2		
420	SPAIN	0	2	1	0	1	4	0	0	8		
421	SWEDEN	0	0	0	0	2	4	0	0	6		
422	SWITZERLAND	1	0	0	1	3	3	0	0	8		
501	ALBANIA	0	0	0	0	0	0	0	0	0		
502	ANDORRA	0	0	0	0	0	0	0	0	0		
503	BULGARIA	0	0	0	0	0	0	0	0	0		
504	CZECHOSLOVAKIA	0	0	0	0	0	0	0	0	0		
505	GERMANY (EAST)	0	0	0	0	0	0	0	0	0		
506	GUATEMALA	0	0	0	0	0	0	0	0	0		
507	HUNGARY	0	0	0	0	0	1	0	0	1		
508	POLAND	0	0	0	0	0	1	0	0	1		
509	RUMANIA	0	0	0	0	0	1	0	0	1		
510	SAN MARINO	0	0	0	0	0	0	0	0	0		
511	USSR (RUSSIA)	0	0	0	0	0	0	0	0	0		
512	YUGOSLAVIA	0	0	0	0	0	0	0	0	0		
601	ALGERIA	0	1	0	0	0	1	0	0	2		
602	IRAQ	0	0	0	1	0	0	0	0	1		
603	IPRAQ	0	0	0	0	0	0	0	0	0		
604	KUWAIT	0	0	0	0	0	0	0	0	0		
605	LIBYA	0	0	0	0	0	0	0	0	0		
605	QATAR	0	0	0	0	0	0	0	0	0		

Exhibit 5 continued

CODE	COUNTRY	LT \$1M	\$1M-\$10M	FINANCE CATEGORY			GT \$100M	UNKNOWN	TOTAL
				\$10M-\$25M	\$25M-\$100M	\$100M-\$100M			
607	SAUDI ARABIA	0	0	0	0	0	1	1	
608	SYRIA	0	0	0	0	0	0	0	
609	TRUCIAL STATES	0	0	0	0	0	0	0	
610	BAHPAIN	0	0	0	0	0	0	0	
611	CHAD	0	0	0	0	0	0	0	
612	DHOFAR	0	0	0	0	0	0	0	
613	DUHAI	0	0	0	0	0	0	0	
614	ISHAEL	0	0	0	0	0	0	0	
615	JORDAN	0	0	0	0	0	0	0	
616	LEBANON	0	0	0	0	0	0	0	
617	MALI	0	0	0	0	0	0	0	
618	MAURITIANA	0	0	0	0	0	0	0	
619	MOROCCO	0	0	1	0	0	0	1	
620	MUSCAT AND OMAN	0	0	0	0	0	0	0	
621	NIGER	0	0	0	0	0	0	0	
622	SOYALI REPUBLIC	0	0	0	0	0	0	0	
623	ADEN (SOUTHERN	0	0	0	0	0	0	0	
623	SOUTHERN YEMEN	0	0	0	0	0	0	0	
624	SPANISH NORTH A	0	0	0	0	0	0	0	
625	SUDAN	0	0	0	0	0	0	0	
626	TUNISIA	0	1	0	0	0	0	1	
627	TURKEY	0	0	0	1	0	0	1	
628	EGYPT (UNITED A	0	0	0	0	0	2	2	
628	UNITED ARAB REP	0	0	0	0	0	0	0	
629	YEMEN	0	0	0	0	0	0	0	
701	AFGHANISTAN	0	0	0	0	0	0	0	
702	CEYLON	0	0	0	0	0	0	0	
703	INDIA	0	1	0	0	0	2	3	
704	MALDIVE ISLAND	0	0	0	0	0	0	0	
705	NEPAL	0	0	0	0	0	0	0	
706	PAKISTAN	0	0	0	0	0	1	1	
707	SEYCHELLES	0	0	0	0	0	0	0	
708	SIKKIM	0	0	0	0	0	0	0	
709	BANGLADESH	0	0	0	0	0	0	0	
800	AFRICA (N.F.S.)	0	0	0	0	0	0	0	

Exhibit 5 continued

CODE	COUNTRY	FINANCE CATEGORY					UNKNOWN	TOTAL
		LT \$1M	(Sales) \$1M-\$10M	\$10M-\$25M	\$25M-\$100M	GT \$100M		
800	ZZ-(OLD) CENTRA	0	0	0	0	0	0	0
800	ZZ-(OLD) EAST A	0	0	0	0	0	0	0
800	ZZ-(OLD) NORTH	0	0	0	0	0	0	0
800	ZZ-(OLD) WEST A	0	0	0	0	0	0	0
801	AFARS AND ISSAS	0	0	0	0	0	0	0
801	FRENCH SOMALIA	0	0	0	0	0	0	0
802	ANGOLA	0	0	0	0	0	0	0
803	BOTSWANA	0	0	0	0	0	0	0
804	BURUNDI	0	0	0	0	0	0	0
805	CAMEROON	0	0	0	0	0	0	0
806	CAPE VERDE ISLA	0	0	0	0	0	0	0
807	CENTRAL AFRICAN	0	0	0	0	0	0	0
808	CONGO ISLANDS	0	0	0	0	0	0	0
809	CONGO, FRENCH	0	0	0	0	0	0	0
809	DEM. CONGO (BRA	0	0	0	0	0	0	0
810	DAHOMEY	0	0	0	0	0	0	0
811	EQUATORIAL GUIN	0	0	0	0	0	0	0
812	ETHIOPIA	0	0	0	0	0	0	0
813	GABON	0	0	0	0	0	0	0
814	GAMBIA	0	0	0	0	0	0	0
815	GHANA	0	0	0	0	0	0	0
816	GUINEA	0	0	0	0	0	0	0
817	IVORY COAST	0	0	0	0	0	0	0
818	KENYA	0	0	0	0	0	1	1
819	LESOTHO	0	0	0	0	0	0	0
820	LIBERIA	0	0	0	0	0	0	0
821	MALAGASY REPUBL	0	0	0	0	0	0	0
822	MALAWI	0	0	0	0	0	0	0
823	MAURITIUS	0	0	0	0	0	0	0
824	MOZAMBIQUE	0	0	0	1	0	0	1
825	NIGERIA	0	0	0	0	0	0	0
826	PORTUGUESE GUIN	0	0	0	0	0	0	0
827	REUNION	0	0	0	0	0	0	0
828	PUARDA	0	0	0	0	0	0	0
829	SAO TOME AND PR	0	0	0	0	0	0	0

Exhibit 5 continued

CODE	COUNTRY	(Sales)		FINANCE CATEGORY			GT \$100M	UNKNOWN	TOTAL
		LT \$1M	\$1M-\$10M	\$10M-\$25M	\$25M-\$100M	\$100M+			
830	SENEGAL	0	0	0	0	0	0	0	0
831	SIERRA LEONE	0	0	0	0	0	0	0	0
832	SWAZILAND	0	0	0	0	0	0	0	0
833	TANZANIA	0	0	0	0	0	0	0	0
834	TOGO	0	0	0	0	0	0	0	0
835	UGANDA	0	0	0	0	0	0	0	0
836	UPPER VOLTA	0	0	0	0	0	0	0	0
837	ZAMBIA	0	0	0	0	0	0	0	0
838	CONGO, BELGIAN	0	1	0	0	0	0	1	2
838	REP. CONGO (ZAI)	0	0	0	0	0	0	0	0
839	ZAIPE (REP. OR	0	0	0	0	0	0	0	0
839	MADAGASCAR	0	0	0	0	0	0	0	0
901	AMERICAN SAMOA	0	0	0	0	0	0	0	0
902	BRITISH SOLOMON	0	0	0	0	0	0	0	0
903	BRUNEI	0	0	0	0	0	0	0	0
904	BURMA	0	0	0	0	0	0	0	0
905	CAMBODIA	0	0	0	0	0	0	0	0
906	CHINA (MAINLAND	0	0	0	0	0	0	0	0
907	CHINA (TAIWAN)	0	0	1	0	0	0	1	2
907	TAIWAN	0	0	0	0	0	0	0	0
908	FIJI	0	0	0	0	0	0	0	0
909	FRENCH POLYNESE	0	0	0	0	0	0	0	0
910	GUAM	0	0	0	0	0	0	0	0
911	HONG KONG	0	0	0	0	0	0	0	0
912	INDONESIA (2ND	0	0	0	0	0	0	2	2
912	INDONESIA (1ST	0	0	0	0	0	0	0	0
913	JAPAN	2	0	0	3	0	2	2	9
914	KOREA (NORTH)	0	0	0	0	0	0	0	0
915	KOREA (SOUTH)	0	0	0	1	0	0	0	1
916	LAOS	0	0	0	0	0	0	0	0
917	MACAU	0	0	0	0	0	0	0	0
918	MALAYSIA	0	0	1	0	0	0	0	1
919	MONGOLIA	0	0	0	0	0	0	0	0
920	NEW CALEDONIA	0	0	0	0	0	0	0	0
921	NEW GUINEA AND	0	0	0	0	0	0	0	0

CODE	COUNTRY	(Sales)							TOTAL
		LT \$1M	\$1M-\$10M	\$10M-\$25M	\$25M-\$100M	GT \$100M	UNKNOWN		
922	NEW HERRIDES	0	0	0	0	0	0	0	
923	PHILIPPINES	1	1	1	1	0	0	4	
924	PORTUGUESE TIMO	0	0	0	0	0	0	0	
925	RYUKYU ISLANDS	0	0	0	0	0	0	0	
926	SINGAPORE	0	0	0	1	0	3	4	
927	THAILAND	0	3	0	0	0	0	3	
928	TONGA	0	0	0	0	0	0	0	
929	VIETNAM (NORTH)	0	0	0	0	0	0	0	
930	VIETNAM (SOUTH)	0	0	0	0	0	0	0	
931	WESTERN SAMOA	0	0	0	0	0	0	0	

Exhibit 5 continued

CODE	COUNTRY	LT \$1M	(Assets) \$1M-\$10M	FINANCE CATEGORY \$10M-\$25M	\$25M-\$100M	GT \$100M	UNKNOWN	TOTAL
1	INTERNATIONAL (	0	0	0	0	0	0	0
1	ZZ-(OLD) ASIA A	0	0	0	0	0	0	0
1	ZZ-(OLD) EUROPE	0	0	0	0	0	0	0
1	ZZ-(OLD) WESTER	0	0	0	0	0	0	0
101	AUSTRALIA	0	3	1	0	3	10	17
102	CANADA	3	4	0	2	4	31	44
103	NEW ZEALAND	0	0	1	1	0	2	4
104	RHODESIA	0	0	0	0	0	3	3
105	ST. PIERRE AND	0	0	0	0	0	0	0
106	SOUTH AFRICA	0	0	1	1	1	8	11
107	SOUTH WEST AFRI	0	0	0	0	0	0	0
108	UNITED STATES	0	0	0	1	2	21	24
109	ANTIGUA	0	0	0	0	0	0	0
200	CENTRAL AMERICA	0	0	0	0	0	0	0
200	ZZ-(OLD) BRITIS	0	0	0	0	0	0	0
202	BAHAMAS	0	0	0	0	0	0	0
203	BARBADOS	0	0	0	0	0	0	0
204	BERMUDA	0	0	0	0	0	2	2
205	BELIZE (BRITISH	0	0	0	0	0	0	0
205	BRITISH HONDURA	0	0	0	0	0	0	0
206	CANAL ZONE (PAN	0	0	0	0	0	0	0
207	COSTA RICA	0	0	0	0	0	0	0
208	CUBA	0	0	0	0	0	1	1
209	DOMINICA	0	0	0	0	0	0	0
210	DOMINICAN REPUB	0	0	0	0	0	0	0
211	EL SALVADOR	0	0	0	0	0	0	0
212	GRENADA	0	0	0	0	0	0	0
213	GUADFLOPE	0	0	0	0	0	0	0
214	GUATEMALA	0	0	0	0	0	0	0
215	HAITI	0	0	0	0	0	0	0
216	HONDURAS	0	0	0	0	0	0	0
217	JAMAICA	0	0	0	0	0	1	1
218	MARTINIQUE	0	0	0	0	0	0	0
219	MEXICO	2	0	2	3	1	4	12

Exhibit 5 continued

CODE	COUNTRY	LT \$1M	(Assets) FINANCE CATEGORY					GT \$100M	UNKNOWN	TOTAL
			\$1M-\$10M	\$10M-\$25M	\$25M-\$100M	\$100M-\$250M	\$250M-\$1000M			
220	DUTCH (NETHERLA	0	0	0	1	1	0	0	2	
220	DUTCH (NETHERLA	0	0	0	0	0	0	0	0	
220	NETHERLANDS (DU	0	0	0	0	0	0	0	0	
220	NETHERLANDS (DU	0	0	0	0	0	0	0	0	
221	NICARAGUA	0	0	0	0	0	0	0	0	
222	PANAMA	1	0	0	0	0	0	0	1	
223	PUERTO RICO	0	0	0	0	0	0	0	0	
224	ST. KITTS-NEVIS	0	0	0	0	0	0	0	0	
225	ST. LUCIA	0	0	0	0	0	0	0	0	
226	ST. VINCENT	0	0	0	0	0	0	0	0	
227	TRINIDAD AND TO	0	0	0	0	0	0	0	0	
228	VIRGIN ISLANDS	0	0	0	0	0	0	0	0	
300	LATIN AMERICA (	0	0	0	0	0	0	0	0
301	BOLIVIA	0	0	0	0	0	0	0	0	
302	CHILE	0	1	0	0	0	0	2	3	
303	COLOMBIA	1	1	0	3	0	1	1	6	
304	ECUADOR	0	0	0	0	0	0	0	0	
305	PERU	0	0	1	0	0	3	0	4	
306	ARGENTINA	2	0	2	0	3	3	10	10	
307	BRAZIL	1	0	1	1	3	7	13	13	
308	FRENCH GUIANA	0	0	0	0	0	0	0	0	
309	BRITISH GUYANA	0	0	0	0	0	0	0	0	
309	BRITISH GUYANA	0	0	0	0	0	0	0	0	
309	GUYANA (BRITISH	0	0	0	0	0	0	0	0	
309	GUYANA (BRITISH	0	0	0	0	0	0	0	0	
310	PARAGUAY	0	0	0	0	0	0	0	0	
311	DUTCH GUIANA (S	0	0	0	0	0	0	0	0	
311	SURINAM (DUTCH	0	0	0	0	0	0	0	0	
312	URUGUAY	1	1	0	0	0	1	3	3	
313	VENEZUELA	1	2	0	3	0	1	7	7	
401	BELGIUM	0	1	1	1	1	1	5	5	
402	FRANCE	0	2	1	6	1	12	22	22	
403	GERMANY (WEST,	2	0	1	0	2	11	16	16	
404	ITALY	2	1	1	1	0	6	11	11	
405	LUXEMBOURG	0	0	0	0	0	1	1	1	

Exhibit 5 continued

CODE	COUNTRY	(Assets)							TOTAL
		LT \$1M	\$1M-\$10M	FINANCE CATEGORY			GT \$100M	UNKNOWN	
				\$10M-\$25M	\$25M-\$100M	GT \$100M			
406	NETHERLANDS	0	1	0	1	0	0	2	4
407	DENMARK	0	1	2	1	0	0	2	6
408	IRELAND	0	3	1	0	0	0	2	6
409	UNITED KINGDOM	7	2	2	4	4	0	31	50
410	AUSTRIA	1	1	1	0	0	0	1	4
411	CYPRUS	0	0	0	0	0	0	0	0
412	FINLAND	0	1	0	1	0	0	0	2
413	GREECE	0	0	0	0	0	0	2	2
414	ICELAND	0	0	0	0	0	0	0	0
415	LIECHTENSTEIN	0	0	0	0	0	0	0	0
416	MALTA	0	0	0	0	0	0	0	0
417	MONACO	0	0	0	0	0	0	0	0
418	NORWAY	0	1	2	0	0	0	0	3
419	PORTUGAL	0	0	1	0	0	0	1	2
420	SPAIN	0	2	1	0	1	1	4	8
421	SWEDEN	1	0	0	2	0	0	3	6
422	SWITZERLAND	0	1	3	0	1	0	3	8
501	ALBANIA	0	0	0	0	0	0	0	0
502	ANDORRA	0	0	0	0	0	0	0	0
503	BULGARIA	0	0	0	0	0	0	0	0
504	CZECHOSLOVAKIA	0	0	0	0	0	0	0	0
505	GERMANY (EAST)	0	0	0	0	0	0	0	0
506	GIBRALTAR	0	0	0	0	0	0	0	0
507	HUNGARY	0	0	0	0	0	0	1	1
508	POLAND	0	0	0	0	0	0	1	1
509	RUMANIA	0	0	0	0	0	0	1	1
510	SAN MARINO	0	0	0	0	0	0	0	0
511	USSR (RUSSIA)	0	0	0	0	0	0	0	0
512	YUGOSLAVIA	0	0	0	0	0	0	0	0
601	ALGERIA	0	1	0	0	0	0	1	2
602	IRAN	0	0	0	0	0	0	1	1
603	IRAQ	0	0	0	0	0	0	0	0
604	KUWAIT	0	0	0	0	0	0	0	0
605	LIBYA	0	0	0	0	0	0	0	0
606	QATAR	0	0	0	0	0	0	0	0

Exhibit 5 continued

CODE	COUNTRY	(Assets)					UNKNOW#N	TOTAL
		LT \$1M	\$1M-\$10M	\$10M-\$25M	\$25M-\$100M	GT \$100M		
607	SAUDI ARABIA	0	0	0	0	0	1	1
608	SYRIA	0	0	0	0	0	0	0
609	TRUCIAL STATES	0	0	0	0	0	0	0
610	BAHRAIN	0	0	0	0	0	0	0
611	CHAD	0	0	0	0	0	0	0
612	DHOFAR	0	0	0	0	0	0	0
613	DUBAI	0	0	0	0	0	0	0
614	ISRAEL	0	0	0	0	0	0	0
615	JORDAN	0	0	0	0	0	0	0
616	LEBANON	0	0	0	0	0	0	0
617	MALI	0	0	0	0	0	0	0
618	MAURITIANA	0	0	0	0	0	0	0
619	MOROCCO	0	0	1	0	0	0	1
620	MUSCAT AND OMAN	0	0	0	0	0	0	0
621	NIGER	0	0	0	0	0	0	0
622	SOMALI REPUBLIC	0	0	0	0	0	0	0
623	ADEN (SOUTHERN	0	0	0	0	0	0	0
624	SOUTHERN YEMEN	0	0	0	0	0	0	0
625	SPANISH NORTH A	0	0	0	0	0	0	0
626	SUDAN	0	0	0	0	0	0	0
627	TUNISIA	0	1	0	0	0	0	1
628	TURKEY	0	0	0	1	0	0	1
628	EGYPT (UNITED A	0	0	0	0	0	2	2
628	UNITED ARAB REP	0	0	0	0	0	0	0
629	YEMEN	0	0	0	0	0	0	0
701	AFGHANISTAN	0	0	0	0	0	0	0
702	CEYLON	0	0	0	0	0	0	0
703	INDIA	0	1	0	0	0	2	3
704	MALDIIVE ISLAND	0	0	0	0	0	0	0
705	NEPAL	0	0	0	0	0	0	0
706	PAKISTAN	0	0	0	0	0	1	1
707	SEYCHELLES	0	0	0	0	0	0	0
708	SIKKIM	0	0	0	0	0	0	0
709	BANGLADESH	0	0	0	0	0	0	0
800	AFRICA (N.F.8.)	0	0	0	0	0	0	0

Exhibit 5 continued

CODE	COUNTRY	LT \$1M	(Assets) \$1M-\$10M	FINANCE CATEGORY \$10M-\$25M	\$25M-\$100M	GT \$100M	UNKNOWN	TOTAL
800	ZZ-(OLD): CENTRA	0	0	0	0	0	0	0
800	ZZ-(OLD): EAST A	0	0	0	0	0	0	0
800	ZZ-(OLD): NORTH	0	0	0	0	0	0	0
800	ZZ-(OLD): WEST A	0	0	0	0	0	0	0
801	AFARS AND ISSAS	0	0	0	0	0	0	0
801	FRENCH SOMALILIA	0	0	0	0	0	0	0
802	ANGOLA	0	0	0	0	0	0	0
803	BOTSWANA	0	0	0	0	0	0	0
804	BURUNDI	0	0	0	0	0	0	0
805	CAMEROON	0	0	0	0	0	0	0
806	CAPE VERDE ISLA	0	0	0	0	0	0	0
807	CENTRAL AFRICAN	0	0	0	0	0	0	0
808	COMORO ISLANDS	0	0	0	0	0	0	0
809	CONGO, FRENCH	0	0	0	0	0	0	0
809	DEM. CONGO (BRA	0	0	0	0	0	0	0
810	DAHOMY	0	0	0	0	0	0	0
811	EQUATORIAL GUIN	0	0	0	0	0	0	0
812	ETHIOPIA	0	0	0	0	0	0	0
813	GABON	0	0	0	0	0	0	0
814	GAMBIA	0	0	0	0	0	0	0
815	GHANA	0	0	0	0	0	0	0
816	GUYANA	0	0	0	0	0	0	0
817	IVORY COAST	0	0	0	0	0	0	0
818	KENYA	0	0	0	0	0	1	1
819	LESOTHO	0	0	0	0	0	0	0
820	LIBERIA	0	0	0	0	0	0	0
821	MALAGASY REPUB	0	0	0	0	0	0	0
822	MALAWI	0	0	0	0	0	0	0
823	MAURITIUS	0	0	0	0	0	0	0
824	MOZAMBIQUE	0	1	0	0	0	0	1
825	NIGERIA	0	0	0	0	0	0	0
826	PORTUGUESE GUIN	0	0	0	0	0	0	0
827	REUNION	0	0	0	0	0	0	0
828	HUANDA	0	0	0	0	0	0	0
829	SAO TOME AND PR	0	0	0	0	0	0	0

Exhibit 5 continued

CODE	COUNTRY	FINANCE CATEGORY					TOTAL
		LT \$1M	(Assets) \$1M-\$10M	\$10M-\$25M	\$25M-\$100M	GT \$100M		UNKNOWN
830	SENEGAL	0	0	0	0	0	0
831	SIERRA LEONE	0	0	0	0	0	0
832	SWAZILAND	0	0	0	0	0	0
833	TANZANIA	0	0	0	0	0	0
834	TOGO	0	0	0	0	0	0
835	UGANDA	0	0	0	0	0	0
836	UPPER VOLTA	0	0	0	0	0	0
837	ZAMBIA	0	0	0	0	0	0
838	CONGO, BELGIAN	0	1	0	0	0	2
838	REP. CONGO (ZAI)	0	0	0	0	0	0
838	ZAIPE (REP. OR	0	0	0	0	0	0
839	MADGASCAP	0	0	0	0	0	0
901	AMERICAN SAMOA	0	0	0	0	0	0
902	BRITISH SOLOMON	0	0	0	0	0	0
903	BRUNEI	0	0	0	0	0	0
904	HUR'VA	0	0	0	0	0	0
905	CAMBODIA	0	0	0	0	0	0
906	CHINA (MAINLAND)	0	0	0	0	0	0
907	CHINA (TAIWAN)	0	1	0	0	0	2
907	TAIWAN	0	0	0	0	0	0
908	FIJI	0	0	0	0	0	0
909	FRENCH POLYNESI	0	0	0	0	0	0
910	GUAM	0	0	0	0	0	0
911	HONG KONG	0	0	0	0	0	0
912	INDONESIA (2ND	0	0	0	0	0	2
912	INDONESIA (1ST	0	0	0	0	0	0
913	JAPAN	2	1	2	0	2	9
914	KOREA (NORTH)	0	0	0	0	0	0
915	KOREA (SOUTH)	0	0	1	0	0	1
916	LAOS	0	0	0	0	0	0
917	MACAU	0	0	0	0	0	0
918	MALAYSIA	0	1	0	0	0	1
919	MONGOLIA	0	0	0	0	0	0
920	NEW CALEDONIA	0	0	0	0	0	0
921	NEW GUINEA AND	0	0	0	0	0	0

Exhibit 5 continued

CODE	COUNTRY	(Assets)							TOTAL
		LT \$1M	\$1M-\$10M	\$10M-\$25M	\$25M-\$100M	GT \$100M	UNKNOWN		
922	NEA HEMERIDES	0	0	0	0	0	0	0	0
923	PHILIPPINES	0	2	1	0	0	1	0	4
924	PORTUGUESE TIMO	0	0	0	0	0	0	0	0
925	RYUKYU ISLANDS	0	0	0	0	0	0	0	0
926	SINGAPORE	1	0	0	0	0	3	0	4
927	THAILAND	1	2	0	0	0	0	0	3
928	TONGA	0	0	0	0	0	0	0	0
929	VIETNAM (NORTH)	0	0	0	0	0	0	0	0
930	VIETNAM (SOUTH)	0	0	0	0	0	0	0	0
931	WESTERN SAMOA	0	0	0	0	0	0	0	0

Exhibit 5 continued

CODE	COUNTRY	LT \$1M	(Equity) \$1M-\$10M	FINANCE CATEGORY \$10M-\$25M	\$25M-\$100M	GT \$100M	UNKNOWN	TOTAL
1	INTERNATIONAL (	0	0	0	0	0	0	0
1	22-(OLD) ASIA A	0	0	0	0	0	0	0
1	27-(OLD) EUROPE	0	0	0	0	0	0	0
1	22-(OLD) WESTER	0	0	0	0	0	0	0
101	AUSTRALIA	1	4	2	2	0	8	17
102	CANADA	3	6	1	1	4	29	44
103	NEW ZEALAND	0	2	0	0	0	2	4
104	RHODESIA	0	0	0	0	0	3	3
105	ST. PIERRE AND	0	0	0	0	0	0	0
106	SOUTH AFRICA	1	2	0	0	0	8	11
107	SOUTH WEST AFRI	0	0	0	0	0	0	0
108	UNITED STATES	1	0	2	1	2	18	24
109	ANTIGUA	0	0	0	0	0	0	0
200	CENTRAL AMERICA	0	0	0	0	0	0	0
200	22-(OLD) BRITIS	0	0	0	0	0	0	0
202	BAHAMAS	0	0	0	0	0	0	0
203	BARBADOS	0	0	0	0	0	0	0
204	BERMUDA	0	0	1	0	0	1	2
205	BERMUDA (BRITISH	0	0	0	0	0	0	0
205	BRITISH HONDURA	0	0	0	0	0	0	0
206	CANAL ZONE (PAN	0	0	0	0	0	0	0
207	COSTA RICA	0	0	0	0	0	0	0
208	CUHA	0	0	0	0	0	1	1
209	DOMINICA	0	0	0	0	0	0	0
210	DOMINICAN REPUB	0	0	0	0	0	0	0
211	EL SALVADOR	0	0	0	0	0	0	0
212	GRENADA	0	0	0	0	0	0	0
213	GUATELPE	0	0	0	0	0	0	0
214	GUATEMALA	0	0	0	0	0	0	0
215	HAITI	0	0	0	0	0	0	0
216	HONDURAS	0	0	0	0	0	0	0
217	JAMAICA	0	0	0	0	0	1	1
218	MARTINIQUE	0	0	0	0	0	0	0
219	MEXICO	2	2	2	1	0	5	12

Exhibit 5 continued

CODE	COUNTRY	(Equity)		FINANCE CATEGORY			GT \$100M	UNKNOWN	TOTAL
		LT \$1M	\$1M-\$10M	\$10M-\$25M	\$25M-\$100M	\$100M			
220	DUTCH (NETHERLA	0	2	0	0	0	0	0	2
220	DUTCH (NETHERLA	0	0	0	0	0	0	0	0
220	NETHERLANDS (DU	0	0	0	0	0	0	0	0
220	NETHERLANDS (DU	0	0	0	0	0	0	0	0
221	NICARAGUA	0	0	0	0	0	0	0	0
222	PANAMA	1	0	0	0	0	0	0	1
223	PUERTO RICO	0	0	0	0	0	0	0	0
224	ST. KITTS-NEVIS	0	0	0	0	0	0	0	0
225	ST. LUCIA	0	0	0	0	0	0	0	0
226	ST. VINCENT	0	0	0	0	0	0	0	0
227	TRINIDAD AND TO	0	0	0	0	0	0	0	0
228	VIRGIN ISLANDS	0	0	0	0	0	0	0	0
300	LATIN AMERICA (	0	0	0	0	0	0	0	0
301	BOLIVIA	0	0	0	0	0	0	0	0
302	CHILE	1	0	0	0	0	0	2	3
303	COLOMBIA	1	1	1	1	1	0	2	6
304	ECUADOR	0	0	0	0	0	0	0	0
305	PERU	0	1	0	0	0	0	3	4
306	ARGENTINA	3	1	1	2	2	0	3	10
307	BRAZIL	1	1	1	1	1	2	7	13
308	FRENCH GUYANA	0	0	0	0	0	0	0	0
309	BRITISH GUYANA	0	0	0	0	0	0	0	0
309	BRITISH GUYANA	0	0	0	0	0	0	0	0
309	GUYANA (BRITISH	0	0	0	0	0	0	0	0
309	GUYANA (BRITISH	0	0	0	0	0	0	0	0
310	PARAGUAY	0	0	0	0	0	0	0	0
311	DUTCH GUYANA (S	0	0	0	0	0	0	0	0
311	SURINAM (DUTCH	0	0	0	0	0	0	0	0
312	URUGUAY	2	0	0	0	0	0	1	3
313	VENEZUELA	3	2	1	0	0	0	1	7
401	BELGIUM	1	2	1	0	0	0	1	5
402	FRANCE	2	3	4	0	1	1	12	22
403	GERMANY (WEST,	6	1	1	0	2	2	6	16
404	ITALY	4	1	0	0	0	0	6	11
405	LUXEMBOURG	0	0	0	0	0	0	1	1

Exhibit 5 continued

CODE	COUNTRY	(Equity)		FINANCE CATEGORY				UNKNOWN	TOTAL
		LT \$1M	\$1M-\$10M	\$10M-\$25M	\$25M-\$100M	GT \$100M			
406	NETHERLANDS	0	1	1	0	0	0	2	4
407	DENMARK	1	3	0	0	0	0	2	6
408	IRELAND	0	4	0	0	0	0	2	6
409	UNITED KINGDOM	11	3	3	3	0	0	30	50
410	AUSTRIA	2	1	0	0	0	0	1	4
411	CYPRUS	0	0	0	0	0	0	0	0
412	FINLAND	0	1	1	0	0	0	0	2
413	GREECE	0	0	0	0	0	0	2	2
414	ICELAND	0	0	0	0	0	0	0	0
415	LIECHTENSTEIN	0	0	0	0	0	0	0	0
416	MALTA	0	0	0	0	0	0	0	0
417	MONACO	0	0	0	0	0	0	0	0
418	NORWAY	2	1	0	0	0	0	0	3
419	PORTUGAL	1	0	0	0	0	0	1	2
420	SPAIN	1	3	0	1	0	0	3	8
421	SWEDEN	1	1	0	1	0	0	3	6
422	SWITZERLAND	3	1	0	0	1	0	3	8
501	AFRICA	0	0	0	0	0	0	0	0
502	ANDORRA	0	0	0	0	0	0	0	0
503	BULGARIA	0	0	0	0	0	0	0	0
504	CZECHOSLOVAKIA	0	0	0	0	0	0	0	0
505	GERMANY (EAST)	0	0	0	0	0	0	0	0
506	GERMANY (WEST)	0	0	0	0	0	0	0	0
507	HUNGARY	0	0	0	0	0	0	1	1
508	POLAND	0	0	0	0	0	0	1	1
509	ROMANIA	0	0	0	0	0	0	1	1
510	SAN MARINO	0	0	0	0	0	0	0	0
511	USSR (RUSSIA)	0	0	0	0	0	0	0	0
512	YUGOSLAVIA	0	0	0	0	0	0	0	0
601	ALGERIA	0	0	0	0	0	0	2	2
602	IRAQ	0	0	0	0	0	0	1	1
603	IRAQ	0	0	0	0	0	0	0	0
604	KUWAIT	0	0	0	0	0	0	0	0
605	LIBYA	0	0	0	0	0	0	0	0
606	QATAR	0	0	0	0	0	0	0	0

Exhibit 5 continued

CODE	COUNTRY	(Equity)					UNKNWDN	TOTAL
		LT \$1M	\$1M-\$10M	\$10M-\$25M	\$25M-\$100M	GT \$100M		
607	SAUDI ARABIA	0	0	0	0	0	1	1
609	SYRIA	0	0	0	0	0	0	0
609	TRUCIAL STATES	0	0	0	0	0	0	0
610	BAHRAIN	0	0	0	0	0	0	0
611	CHAD	0	0	0	0	0	0	0
612	DHOFAR	0	0	0	0	0	0	0
613	DUBAI	0	0	0	0	0	0	0
614	ISRAEL	0	0	0	0	0	0	0
615	JORDAN	0	0	0	0	0	0	0
616	LEBANON	0	0	0	0	0	0	0
617	MALI	0	0	0	0	0	0	0
618	MAURITIANA	0	0	0	0	0	0	0
619	MOROCCO	0	1	0	0	0	0	1
620	MUSCAT AND OMAN	0	0	0	0	0	0	0
621	NIGER	0	0	0	0	0	0	0
622	SOMALI REPUBLIC	0	0	0	0	0	0	0
623	ADEN (SOUTHERN	0	0	0	0	0	0	0
623	SOUTHERN YEMEN	0	0	0	0	0	0	0
624	SPANISH NORTH A	0	0	0	0	0	0	0
625	SUDAN	0	0	0	0	0	0	0
626	TUNISIA	1	0	0	0	0	0	1
627	TURKEY	0	1	0	0	0	0	1
628	EGYPT (UNITED A	0	0	0	0	0	2	2
628	UNITED ARAB REP	0	0	0	0	0	0	0
629	YEMEN	0	0	0	0	0	0	0
701	AFGHANISTAN	0	0	0	0	0	0	0
702	CEYLON	0	0	0	0	0	0	0
703	INDIA	1	0	0	0	0	2	3
704	MALDIVIVE ISLAND	0	0	0	0	0	0	0
705	NEPAL	0	0	0	0	0	0	0
706	PAKISTAN	0	0	0	0	0	1	1
707	SEYCHELLES	0	0	0	0	0	0	0
708	SIKKIM	0	0	0	0	0	0	0
709	BANGLADESH	0	0	0	0	0	0	0
800	AFRICA (N.F.S.)	0	0	0	0	0	0	0

Exhibit 5 continued

CODE	COUNTRY	LT \$1M	(Equity) \$1M-\$10M	FINANCE CATEGORY \$10M-\$25M	\$25M-\$100M	GT \$100M	UNKNOWN	TOTAL
800 ZZ-(OLD): CENTRA		0	0	0	0	0	0	0
800 ZZ-(OLD): EAST A		0	0	0	0	0	0	0
800 ZZ-(OLD): NORTH		0	0	0	0	0	0	0
800 ZZ-(OLD): WEST A		0	0	0	0	0	0	0
801 AFARS AND ISSAS		0	0	0	0	0	0	0
801 FRENCH SOMALILIA		0	0	0	0	0	0	0
802 ANGOLA		0	0	0	0	0	0	0
803 BOTSWANA		0	0	0	0	0	0	0
804 BURUNDI		0	0	0	0	0	0	0
805 CAMEROON		0	0	0	0	0	0	0
806 CAPE VERDE ISLA		0	0	0	0	0	0	0
807 CENTRAL AFRICAN		0	0	0	0	0	0	0
808 COMORO ISLANDS		0	0	0	0	0	0	0
809 CONGO, FRENCH		0	0	0	0	0	0	0
809 DEM. CONGO (BRA		0	0	0	0	0	0	0
810 DAHOMEY		0	0	0	0	0	0	0
811 EQUATORIAL GUIN		0	0	0	0	0	0	0
812 ETHIOPIA		0	0	0	0	0	0	0
813 GABON		0	0	0	0	0	0	0
814 GAMBIA		0	0	0	0	0	0	0
815 GHANA		0	0	0	0	0	0	0
816 GUINEA		0	0	0	0	0	0	0
817 IVORY COAST		0	0	0	0	0	0	0
818 KENYA		0	0	0	0	0	1	1
819 LESOTHO		0	0	0	0	0	0	0
820 LIKEPIA		0	0	0	0	0	0	0
821 MALAGASY REPUBU		0	0	0	0	0	0	0
822 MALAWI		0	0	0	0	0	0	0
823 MAURITIUS		0	0	0	0	0	0	0
824 MOZAMBIQUE		0	1	0	0	0	0	1
825 NIGERIA		0	0	0	0	0	0	0
826 PORTUGUESE GUIN		0	0	0	0	0	0	0
827 REUNION		0	0	0	0	0	0	0
828 RUANDA		0	0	0	0	0	0	0
829 SAO TOME AND PR		0	0	0	0	0	0	0

Exhibit 5 continued

CCODE	COUNTRY	(Equity)					GT \$100M	UNKNOWN	TOTAL
		LT \$1M	\$1M-\$10M	\$10M-\$25M	\$25M-\$100M	\$100M			
830	SENEGAL	0	0	0	0	0	0	0	
831	SIERRA LEONE	0	0	0	0	0	0	0	
832	SWAZILAND	0	0	0	0	0	0	0	
833	TANZANIA	0	0	0	0	0	0	0	
834	TOGO	0	0	0	0	0	0	0	
835	UGANDA	0	0	0	0	0	0	0	
836	UPPER VOLTA	0	0	0	0	0	0	0	
837	ZAMBIA	0	0	0	0	0	0	0	
838	CONGO, BELGIAN	1	0	0	0	0	1	2	
839	REP. CONGO (ZAI)	0	0	0	0	0	0	0	
838	ZAIRE (REP. OR	0	0	0	0	0	0	0	
839	MADAGASCAR	0	0	0	0	0	0	0	
901	AMERICAN SAMOA	0	0	0	0	0	0	0	
902	BRITISH SOLOMON	0	0	0	0	0	0	0	
903	BRUNEI	0	0	0	0	0	0	0	
904	BURMA	0	0	0	0	0	0	0	
905	CAMBODIA	0	0	0	0	0	0	0	
906	CHINA (MAINLAND)	0	0	0	0	0	0	0	
907	CHINA (TAIWAN)	0	1	0	0	0	1	2	
907	TAIWAN	0	0	0	0	0	0	0	
908	FIJI	0	0	0	0	0	0	0	
909	FRENCH POLYNESE	0	0	0	0	0	0	0	
910	GUAM	0	0	0	0	0	0	0	
911	HONG KONG	0	0	0	0	0	0	0	
912	INDONESIA (2ND)	0	0	0	0	0	2	2	
912	INDONESIA (1ST)	0	0	0	0	0	0	0	
913	JAPAN	3	1	0	0	2	3	9	
914	KOREA (NORTH)	0	0	0	0	0	0	0	
915	KOREA (SOUTH)	0	0	0	0	0	1	1	
916	LAOS	0	0	0	0	0	0	0	
917	MACAU	0	0	0	0	0	0	0	
918	MALAYSIA	0	1	0	0	0	0	1	
919	MONGOLIA	0	0	0	0	0	0	0	
920	NEW CALEDONIA	0	0	0	0	0	0	0	
921	NEW GUINEA AND	0	0	0	0	0	0	0	

Exhibit 5 continued

CODE	COUNTRY	FINANCE CATEGORY						TOTAL
		LT \$1M	(Equity) \$1M-\$10M	\$10M-\$25M	\$25M-\$100M	GT \$100M	UNKNOWN	
922	NEW HEBRIDES	0	0	0	0	0	0	0
923	PHILIPPINES	1	3	0	0	0	0	4
924	PORTUGUESE TIMO	0	0	0	0	0	0	0
925	RYUKYU ISLANDS	0	0	0	0	0	0	0
926	SINGAPORE	1	0	0	0	0	3	4
927	THAILAND	3	0	0	0	0	0	3
928	TONGA	0	0	0	0	0	0	0
929	VIETNAM (NORTH)	0	0	0	0	0	0	0
930	VIETNAM (SOUTH)	0	0	0	0	0	0	0
931	WESTERN SAMOA	0	0	0	0	0	0	0

ACTIVITY	0-100	101-500	501-1000	1001-5000	5001-10000	>10000	UNKNOWN	TOTAL
MANUFAC	7	9	14	30	5	16	43	124
•R & D•	0	0	0	0	0	0	0	0
•SALES•	31	17	3	0	0	0	55	106
•OTHER	4	1	1	1	0	0	36	43
UNKNOWN	0	0	0	1	0	0	98	99
•TOTAL•	42	27	18	32	5	16	232	372

Exhibit 6
Total Subsidiaries by Principal Activity
and the Number of Employees in 1976

Exhibit 7
Total Subsidiaries by
Principal Activity and
Percentage of Ownership
at Entry

ACTIVITY	% of ownership				TOTAL
	1-49 %	50 %	51-95 %	96-100%	
MANUFAC	16	8	17	118	168
R & D	0	0	0	0	0
SALES	1	2	4	142	149
OTHER	0	0	0	23	26
UNKNOWN	0	0	0	7	29
TOTAL	17	10	21	305	372

Exhibit 7A
Total Subsidiaries by
Principal Activity and
Percentage of Ownership
in 1976

ACTIVITY	% of ownership				TOTAL
	1-49 %	50 %	51-95 %	96-100%	
MANUFAC	10	3	18	87	124
R & D	0	0	0	0	0
SALES	2	2	4	93	106
OTHER	0	1	2	33	43
UNKNOWN	1	0	0	12	99
TOTAL	13	6	24	225	372
EXITED	3	0	0	31	(79)

Exhibit 8

Latest Ownership of Subsidiary
by Country of Incorporation

CODE	COUNTRY	1-49 %	50 %	51-95 %	96-100%	UNKNOWN	TOTAL
1	INTERNATIONAL (	0	0	0	0	0	0
1	ZZ-(OLD) ASIA A	0	0	0	0	0	0
1	ZZ-(OLD) EUROPE	0	0	0	0	0	0
1	ZZ-(OLD) WESTER	0	0	0	0	0	0
101	AUSTPALIA	0	1	0	12	4	17
102	CANADA	0	0	2	17	25	44
103	NEW ZEALAND	0	0	0	4	0	4
104	RHODESIA	0	0	1	1	1	3
105	ST. PIERRE AND	0	0	0	0	0	0
106	SOUTH AFRICA	0	0	0	10	1	11
107	SOUTH WEST AFRI	0	0	0	0	0	0
108	UNITED STATES	0	0	0	15	9	24
109	ANTIGUA	0	0	0	0	0	0
200	CENTRAL AMERICA	0	0	0	0	0	0
200	ZZ-(OLD) BRITIS	0	0	0	0	0	0
202	BAHAMAS	0	0	0	0	0	0
203	BAPBADOS	0	0	0	0	0	0
203	BERMUDA	0	0	0	2	0	2
205	BERLIZE (BRITISH	0	0	0	0	0	0
205	BRITISH HONDURA	0	0	0	0	0	0
206	CANAL ZONE (PAN	0	0	0	0	0	0
207	COSTA RICA	0	0	0	0	0	0
208	CUBA	0	0	0	0	1	1
209	DOMINICA	0	0	0	0	0	0
210	DOMINICAN REPUB	0	0	0	0	0	0
211	EL SALVADOR	0	0	0	0	0	0
212	GRENADA	0	0	0	0	0	0
213	GUADELOUPE	0	0	0	0	0	0
214	GUATEMALA	0	0	0	0	0	0
215	HAITI	0	0	0	0	0	0
216	HONDURAS	0	0	0	0	0	0
217	JAMAICA	0	0	0	0	1	1
218	MARTINIQUE	0	0	0	0	0	0
219	MEXICO	1	0	0	9	2	12

Exhibit 8 continued

CODE	COUNTRY	1-49 %	50 %	51-95 %	96-100%	UNKNOWN	TOTAL
220	DUTCH (NETHERLA	0	0	0	2	0	2
220	DUTCH (NETHERLA	0	0	0	0	0	0
220	NETHERLANDS (DU	0	0	0	0	0	0
220	NETHERLANDS (DU	0	0	0	0	0	0
221	NICARAGUA	0	0	0	0	0	0
222	PANAMA	0	0	0	1	0	1
223	PUERTO RICO	0	0	0	0	0	0
224	ST. KITTS-NEVIS	0	0	0	0	0	0
225	ST. LUCIA	0	0	0	0	0	0
226	ST. VINCENT	0	0	0	0	0	0
227	TRINIDAD AND TO	0	0	0	0	0	0
228	VIRGIN ISLANDS	0	0	0	0	0	0
300	LATIN AMERICA (	0	0	0	0	0	0
301	BOLIVIA	0	0	0	0	0	0
302	CHILE	1	0	0	1	1	3
303	COLOMBIA	1	0	2	2	1	6
304	ECUADOR	0	0	0	0	0	0
305	PERU	0	0	1	1	2	4
306	ARGENTINA	1	0	0	8	1	10
307	BRASIL	0	0	5	8	0	13
308	FRENCH GUIANA	0	0	0	0	0	0
309	BRITISH GUYANA	0	0	0	0	0	0
309	BRITISH GUYANA	0	0	0	0	0	0
309	GUYANA (BRITISH	0	0	0	0	0	0
309	GUYANA (BRITISH	0	0	0	0	0	0
310	PAPAGUAY	0	0	0	0	0	0
311	DUTCH GUIANA (S	0	0	0	0	0	0
311	SOUTHAM (DUTCH	0	0	0	0	0	0
312	URUGUAY	1	0	0	2	0	3
313	VENEZUELA	0	0	0	6	1	7
401	BELGIUM	0	0	1	4	0	5
402	FRANCE	0	0	1	10	11	22
403	GERMANY (WEST,	0	0	0	13	3	16
404	ITALY	0	0	0	10	1	11
405	LUXEMBOURG	0	0	0	1	0	1

Exhibit 8 continued

CODE	COUNTRY	1-49 %	50 %	51-95 %	96-100%	UNKNOWN	TOTAL
406	NETHERLANDS	0	0	1	3	0	4
407	DNENMARK	0	0	1	4	1	6
408	IRELAND	0	0	0	5	1	6
409	UNITED KINGDOM	1	1	1	33	14	50
410	AUSTRIA	0	0	1	2	1	4
411	CYPRUS	0	0	0	0	0	0
412	FINLAND	0	0	1	1	0	2
413	GREECE	0	0	0	0	2	2
414	ICELAND	0	0	0	0	0	0
415	LIECHTENSTEIN	0	0	0	0	0	0
416	MALTA	0	0	0	0	0	0
417	MORACO	0	0	0	0	0	0
418	NORWAY	0	0	0	3	0	3
419	PORTUGAL	0	0	0	2	0	2
420	SPAIN	0	1	1	4	2	8
421	SWEDEN	0	0	1	3	2	6
422	SWITZERLAND	0	0	0	7	1	8
501	ALBANIA	0	0	0	0	0	0
502	ANDORRA	0	0	0	0	0	0
503	BULGARIA	0	0	0	0	0	0
504	CZECHOSLOVAKIA	0	0	0	0	0	0
505	GERMANY (EAST)	0	0	0	0	0	0
506	GIBRALTAR	0	0	0	0	0	0
507	HUNGARY	0	0	0	0	1	1
508	POLAND	0	0	0	0	1	1
509	RUMANIA	0	0	0	0	1	1
510	SAN MARINO	0	0	0	0	0	0
511	USSR (RUSSIA)	0	0	0	0	0	0
512	YUGOSLAVIA	0	0	0	0	0	0
601	ALGERIA	0	0	0	1	1	2
602	IRAN	1	0	0	0	0	1
603	IRAQ	0	0	0	0	0	0
604	KUWAIT	0	0	0	0	0	0
605	LIHYA	0	0	0	0	0	0
606	QATAR	0	0	0	0	0	0

Exhibit 8 continued

CODE	COUNTRY	1-49 %	50 %	51-95 %	96-100 %	UNKNOWN	TOTAL
607	SAUDI ARABIA	0	0	1	0	0	1
608	SYRIA	0	0	0	0	0	0
609	TRUCIAL STATES	0	0	0	0	0	0
610	BAHRAIN	0	0	0	0	0	0
611	CHAD	0	0	0	0	0	0
612	DHOFAR	0	0	0	0	0	0
613	DUBAI	0	0	0	0	0	0
614	ISRAEL	0	0	0	0	0	0
615	JORDAN	0	0	0	0	0	0
616	LEBANON	0	0	0	0	0	0
617	MALI	0	0	0	0	0	0
618	MAURITIANA	0	0	0	0	0	0
619	MOROCCO	1	0	0	0	0	1
620	MUSCAT AND OMAN	0	0	0	0	0	0
621	NIGER	0	0	0	0	0	0
622	SOMALI REPUBLIC	0	0	0	0	0	0
623	A DEN (SOUTHERN	0	0	0	0	0	0
623	SOUTHERN YEMEN	0	0	0	0	0	0
624	SPANISH NORTH A	0	0	0	0	0	0
625	SUDAN	0	0	0	0	0	0
626	TUNISIA	0	0	0	1	0	1
627	TURKEY	0	0	1	0	0	1
628	EGYPT (UNITED A	0	0	0	1	1	2
628	UNITED ARAB REP	0	0	0	0	0	0
629	YEMEN	0	0	0	0	0	0
701	AFGHANISTAN	0	0	0	0	0	0
702	CEYLON	0	0	0	0	0	0
703	INDIA	1	0	0	0	2	3
704	MALDIVE ISLAND	0	0	0	0	0	0
705	NEPAL	0	0	0	0	0	0
706	PAKISTAN	0	0	0	0	1	1
707	SEYCHELLES	0	0	0	0	0	0
708	SIKKIM	0	0	0	0	0	0
709	BANGLADESH	0	0	0	0	0	0
800	AFRICA (N.F.S.)	0	0	0	0	0	0

Exhibit 8 continued

CODE	COUNTRY	1-49 %	50 %	51-95 %	96-100%	UNKNOWN	TOTAL
800	ZZ-(OLD): CENTRA	0	0	0	0	0	0
800	ZZ-(OLD): EAST A	0	0	0	0	0	0
800	ZZ-(OLD): NORTH	0	0	0	0	0	0
800	ZZ-(OLD): WEST A	0	0	0	0	0	0
801	AFARS AND ISSAS	0	0	0	0	0	0
801	FRENCH SOMALILA	0	0	0	0	0	0
801	ANGOLA	0	0	0	0	0	0
803	BOTSWANA	0	0	0	0	0	0
804	BURUNDI	0	0	0	0	0	0
805	CAMEROON	0	0	0	0	0	0
806	CAPE VERDE ISLA	0	0	0	0	0	0
807	CENTRAL AFRICAN	0	0	0	0	0	0
808	COMORO ISLANDS	0	0	0	0	0	0
809	CONGO, FRENCH	0	0	0	0	0	0
809	DEM. CONGO (BRA	0	0	0	0	0	0
810	DAHOMEY	0	0	0	0	0	0
811	EQUATORIAL GUIN	0	0	0	0	0	0
812	ETHIOPIA	0	0	0	0	0	0
813	GABON	0	0	0	0	0	0
814	GAMBIA	0	0	0	0	0	0
815	GHANA	0	0	0	0	0	0
816	GUINEA	0	0	0	0	0	0
817	IVORY COAST	0	0	0	0	0	0
818	KENYA	0	0	0	1	0	1
819	LESOTHO	0	0	0	0	0	0
820	LIBERIA	0	0	0	0	0	0
821	MALAGASY REPUBU	0	0	0	0	0	0
822	MALAWI	0	0	0	0	0	0
823	MAURITIUS	0	0	0	0	0	0
824	MOZAMBIQUE	0	0	0	1	0	1
825	NIGERIA	0	0	0	0	0	0
826	PORTUGUESE GUIN	0	0	0	0	0	0
827	REUNION	0	0	0	0	0	0
828	RUANDA	0	0	0	0	0	0
829	SAO TOME AND PR	0	0	0	0	0	0

Exhibit 8 continued

CODE	COUNTRY	1-49	50	51-95	96-100	UNKNOWN	TOTAL
830	SENEGAL	0	0	0	0	0	0
831	SIERRA LEONE	0	0	0	0	0	0
832	SWAZILAND	0	0	0	0	0	0
833	TANZANIA	0	0	0	0	0	0
834	TOGO	0	0	0	0	0	0
835	UGANDA	0	0	0	0	0	0
836	UPPER VOLTA	0	0	0	0	0	0
837	ZAMBIA	0	0	0	0	0	0
838	CONGO, BELGIAN	0	0	0	2	0	2
839	REP. CONGO (ZAI)	0	0	0	0	0	0
838	ZAIRE (REP. DR)	0	0	0	0	0	0
839	MADAGASCAR	0	0	0	0	0	0
901	AMERICAN SAMOA	0	0	0	0	0	0
902	BRITISH SOLOMON	0	0	0	0	0	0
903	BRUNEI	0	0	0	0	0	0
904	BURMA	0	0	0	0	0	0
905	CAMBODIA	0	0	0	0	0	0
905	CHINA (MAINLAND)	0	0	0	0	0	0
907	CHINA (TAIWAN)	0	0	1	0	1	2
907	TAIWAN	0	0	0	0	0	0
908	FILIP	0	0	0	0	0	0
909	FRENCH POLYNESI	0	0	0	0	0	0
910	GUAM	0	0	0	0	0	0
911	HONG KONG	0	0	0	0	0	0
912	INDONESIA (2ND)	0	0	0	0	2	2
912	INDONESIA (1ST)	0	0	0	0	0	0
913	JAPAN	3	2	0	2	2	9
914	KOREA (NORTH)	0	0	0	0	0	0
915	KOREA (SOUTH)	0	1	0	0	0	1
916	LAOS	0	0	0	0	0	0
917	MACAU	0	0	0	0	0	0
918	MALAYSIA	0	0	0	1	0	1
919	MONGOLIA	0	0	0	0	0	0
920	NEW CALEDONIA	0	0	0	0	0	0
921	NEW GUINEA AND	0	0	0	0	0	0

Exhibit 8 continued

CODE	COUNTRY	1-49 %	50 %	51-95 %	96-100%	UNKNOWN	TOTAL
922	NEW HERRIDES	0	0	0	0	0	0
923	PHILIPPINES	0	0	1	3	0	4
924	PORTUGUESE TIMO	0	0	0	0	0	0
925	RYUKYU ISLANDS	0	0	0	0	0	0
926	SINGAPORE	0	0	0	3	1	4
927	THAILAND	1	0	0	2	0	3
928	TONGA	0	0	0	0	0	0
929	VIETNAM (NORTH)	0	0	0	0	0	0
930	VIETNAM (SOUTH)	0	0	0	0	0	0
931	WESTERN SAMOA	0	0	0	0	0	0

Activity	Manufacturing	R&D	Sales	Other	Unknown	Exited	Total
Sales							
Exported							
< 10%	49	0	29	3	0	0	81
10%-50%	20	0	0	0	1	0	21
> 50%	11	0	2	1	1	0	15
Unknown	44	0	75	39	28	79	255
Total	124	0	106	43	20	79	372

Exhibit 9

Total Subsidiaries by Principal Markets in 1976.

Exhibit 10

Total Subsidiaries by Geographic Location and Principal Markets in 1976

CODE	COUNTRY	SALES TO EXPORT	< 10%	10%-50%	> 50%	UNKNOWN	TOTAL
1	INTERNATIONAL (	0	0	0	0	0	0
1	22-(OLD) ASIA A	0	0	0	0	0	0
1	22-(OLD) EUROPE	0	0	0	0	0	0
1	22-(OLD) WESTER	0	0	0	0	0	0
101	AUSTRALIA	4	1	0	0	12	17
102	CANADA	6	2	1	0	35	44
103	NEW ZEALAND	2	0	0	0	2	4
104	RHODESIA	0	0	0	0	3	3
105	ST. PIERRE AND	0	0	0	0	0	0
106	SOUTH AFRICA	3	0	0	0	8	11
107	SOUTH WEST AFRI	0	0	0	0	0	0
108	UNITED STATES	0	1	0	0	23	24
109	ANTIGUA	0	0	0	0	0	0
200	CENTRAL AMERICA	0	0	0	0	0	0
200	22-(OLD) BHITIS	0	0	0	0	0	0
202	BAHAMAS	0	0	0	0	0	0
203	BARBADOS	0	0	0	0	0	0
204	BERMUDA	0	0	0	0	2	2
205	BELIZE (BRITISH	0	0	0	0	0	0
205	BRITISH HONDURA	0	0	0	0	0	0
206	CARAL ZONE (PAN	0	0	0	0	0	0
207	COSTA RICA	0	0	0	0	0	0
208	CURA	0	0	0	0	1	1
209	DOMINICA	0	0	0	0	0	0
210	DOMINICAN REPUB	0	0	0	0	0	0
211	EL SALVADOR	0	0	0	0	0	0
212	GUEREA	0	0	0	0	0	0
213	GUADELOPE	0	0	0	0	0	0
214	GUATEMALA	0	0	0	0	0	0
215	HAWAII	0	0	0	0	0	0
216	HONGKONG	0	0	0	0	0	0
217	JAMAICA	0	0	0	0	1	1
214	MARTINIQUE	0	0	0	0	0	0
219	MEXICO	3	2	0	0	7	12
220	DUTCH GUYANA	1	0	0	0	1	2
221	DUTCH GUYANA	0	0	0	0	0	0
220	NETHERLANDS (DU	0	0	0	0	0	0
220	NETHERLANDS (DU	0	0	0	0	0	0
220	NETHERLANDS (DU	0	0	0	0	0	0
221	NICARAGUA	0	0	0	0	0	0

Exhibit 10 continued

SALES TO EXPORT	< 10%	10%-50%	> 50%	UNKNOWN	TOTAL
CODI. COUNTRY					
222 PANAMA	0	0	0	1	1
223 PUERTO RICO	0	0	0	0	0
224 ST. KITTS-NEVIS	0	0	0	0	0
225 ST. LUCIA	0	0	0	0	0
226 ST. VINCENT	0	0	0	0	0
227 TRINIDAD AND TO	0	0	0	0	0
228 VIRGIN ISLANDS	0	0	0	0	0
300 LATIN AMERICA (	0	0	0	0	0
301 BOLIVIA	0	0	0	0	0
302 CHILE	1	0	0	2	3
303 COLOMBIA	2	0	0	4	6
304 ECUADOR	0	0	0	0	0
305 PERU	1	0	0	3	4
306 ARGENTINA	5	1	0	4	10
307 BRAZIL	5	1	0	7	13
308 FRENCH GUIANA	0	0	0	0	0
309 BRITISH GUYANA	0	0	0	0	0
300 BRITISH GUYANA	0	0	0	0	0
309 GUYANA (BRITISH	0	0	0	0	0
309 GUYANA (BRITISH	0	0	0	0	0
310 PARAGUAY	0	0	0	0	0
311 DUTCH GUYANA (S	0	0	0	0	0
311 SURINAM (DUTCH	0	0	0	0	0
312 URUGUAY	3	0	0	0	3
313 YERUFANIA	3	1	0	3	7
401 BELGIUM	1	1	1	2	5
402 FRANCE	1	4	2	15	22
403 GERMANY (WEST,	4	0	2	10	16
404 ITALY	1	0	0	10	11
405 LUXEMBOURG	0	0	1	0	1
406 NETHERLANDS	1	1	0	2	4
407 DENMARK	3	0	0	3	6
408 JAPAN	1	0	1	4	6
409 POLISH KINGDOM	3	3	5	39	50
411 AUSTRIA	1	0	0	3	4
411 GREECE	0	0	0	0	0
412 PORTUGAL	2	0	0	0	2
413 SWITZER	0	0	0	2	2
414 ICELAND	0	0	0	0	0
415 TWENTY-STEP.	0	0	0	0	0

Exhibit 10 continued

SALES TO EXPORT	CODE	COUNTRY	< 10%	10%-50%	> 50%	UNKNOWN	TOTAL
	416	ITALY	0	0	0	0	0
	417	COLOCO	0	0	0	0	0
	418	NOFWAY	2	0	0	1	3
	419	PORTUGAL	0	0	0	2	2
	420	SPAIN	1	0	1	6	8
	421	SWEDEN	1	0	0	5	6
	422	SWITZERLAND	3	0	1	4	8
	501	ADABIA	0	0	0	0	0
	502	ADOFFA	0	0	0	0	0
	503	MBICARIA	0	0	0	0	0
	504	CZECHOSLOVAKIA	0	0	0	0	0
	505	GERMANY (EAST)	0	0	0	0	0
	506	GIBALTAI	0	0	0	0	0
	507	HUNGARY	0	0	0	1	1
	508	POLAND	0	0	0	1	1
	509	ROMANIA	0	0	0	1	1
	510	SA. MARIO	0	0	0	0	0
	511	USSR (RUSSIA)	0	0	0	0	0
	512	YUGOSLAVIA	0	0	0	0	0
	601	ALGERIA	1	0	0	1	2
	602	IRAQ	0	0	0	1	1
	603	IRAN	0	0	0	0	0
	604	KUWAIT	0	0	0	0	0
	605	LIBYA	0	0	0	0	0
	606	QATAR	0	0	0	0	0
	607	SAUDI ARABIA	0	0	0	1	1
	608	SYRIA	0	0	0	0	0
	609	INDICIAL STATES	0	0	0	0	0
	610	BAHRAIN	0	0	0	0	0
	611	CHAD	0	0	0	0	0
	612	EGYPT	0	0	0	0	0
	613	DUBAI	0	0	0	0	0
	614	ISRAEL	0	0	0	0	0
	615	JORDAN	0	0	0	0	0
	616	LEBANON	0	0	0	0	0
	617	MALI	0	0	0	0	0
	618	MAURITIANA	0	0	0	0	0
	619	MOROCCO	1	0	0	0	1
	620	MUSCAT AND OMAN	0	0	0	0	0
	621	NIGER	0	0	0	0	0

Exhibit 10 continued

SALES TO EXPORT	< 10%	10%-50%	> 50%	UNKNOWN	TOTAL
CODE COUNTRY					
622 SOVAIL REPUBLIC	0	0	0	0	0
623 ADEN (SOUTHERN)	0	0	0	0	0
624 SOUTHERN YEMEN	0	0	0	0	0
625 SPANISH NORTH A	0	0	0	0	0
626 SUDAN	0	0	0	0	0
628 TUNISIA	0	0	0	1	1
629 TURKEY	1	0	0	0	1
628 SUDPT (UNITED A	0	0	0	2	2
623 UNITED ARAB REP	0	0	0	0	0
629 YEMEP	0	0	0	0	0
701 AFGHANISTAN	0	0	0	0	0
702 CEYLON	0	0	0	0	0
703 INDIA	1	0	0	2	3
704 MALDIVIVE ISLAND	0	0	0	0	0
705 NEPAL	0	0	0	0	0
706 PAKISTAN	0	0	0	1	1
707 SEICHELES	0	0	0	0	0
704 SERIM	0	0	0	0	0
709 BANGLADESH	0	0	0	0	0
800 AFRICA (C.F.O.S.)	0	0	0	0	0
801 Z2-(OLD) CERIA	0	0	0	0	0
801 Z2-(OLD) EAST A	0	0	0	0	0
801 Z2-(OLD) NORTH	0	0	0	0	0
801 Z2-(OLD) WEST A	0	0	0	0	0
801 AFAPS AND ISSAS	0	0	0	0	0
801 FRENCH SOMALIA	0	0	0	0	0
802 ALGERIA	0	0	0	0	0
803 MALIBARA	0	0	0	0	0
803 MALIBARI	0	0	0	0	0
805 CAIRKONG	0	0	0	0	0
805 CAPE VERDE ISLA	0	0	0	0	0
807 CENTRAL AFRICAN	0	0	0	0	0
808 CONGO ISLANDS	0	0	0	0	0
807 CONGO FRENCH	0	0	0	0	0
809 CONGO (BRA)	0	0	0	0	0
810 GAMBIA	0	0	0	0	0
811 GUINEA	0	0	0	0	0
812 GUINEA	0	0	0	0	0
813 GAMBIA	0	0	0	0	0
811 GUINEA	0	0	0	0	0

Exhibit 10 continued

SALES TO EXPORT	< 10%	10%-50%	> 50%	UNKNOWN	TOTAL
CODE COUNTRY					
815 GHANA	0	0	0	0	0
816 GUINEA	0	0	0	0	0
817 IVORY COAST	0	0	0	0	0
818 KENYA	0	0	0	1	1
819 LESOTHO	0	0	0	0	0
820 LIBERIA	0	0	0	0	0
821 MALAGASY REPUBLIC	0	0	0	0	0
822 MALAWI	0	0	0	0	0
823 MAURITIUS	0	0	0	0	0
824 MOZAMBIQUE	0	0	0	1	1
825 NIGERIA	0	0	0	0	0
826 PORTUGUESE GUIN	0	0	0	0	0
827 REUNION	0	0	0	0	0
828 RWANDA	0	0	0	0	0
829 SAO TOME AND PR	0	0	0	0	0
830 SENEGAL	0	0	0	0	0
831 SIERRA LIONE	0	0	0	0	0
832 S. AZERLAND	0	0	0	0	0
833 TANZANIA	0	0	0	0	0
834 TOGO	0	0	0	0	0
835 UGANDA	0	0	0	0	0
836 UPPER VOLT	0	0	0	0	0
837 ZAMBIA	0	0	0	0	0
838 CONGO, BELGIAN	1	0	0	1	2
839 REP. CONGO (ZAI)	0	0	0	0	0
837 ZAIRE (REP. OP)	0	0	0	0	0
839 MADAGASCAR	0	0	0	0	0
901 AMERICAN SAMOA	0	0	0	0	0
902 FIJIAN SOLOMON	0	0	0	0	0
903 BRUNEI	0	0	0	0	0
904 BURMA	0	0	0	0	0
905 CAMBODIA	0	0	0	0	0
906 CHINA (HAINAN)	0	0	0	0	0
907 CHINA (TAIWAN)	0	1	0	1	2
907 TAIWAN	0	0	0	0	0
909 FIJI	0	0	0	0	0
909 FRENCH POLYNESE	0	0	0	0	0
910 GUAM	0	0	0	0	0
911 HONG KONG	0	0	0	0	0
912 INDONESIA (2ND)	0	0	0	2	2

Exhibit 10 continued

CODE	COUNTRY	SALES TO EXPORT	< 10%	10%-50%	> 50%	UNKNOWN	TOTAL
912	INDONESIA (1ST)	0	0	0	0	0	0
913	JAPAN	4	1	0	0	4	9
914	KOREA (NORTH)	0	0	0	0	0	0
915	KOREA (SOUTH)	0	0	0	0	1	1
916	LAOS	0	0	0	0	0	0
917	MACAU	0	0	0	0	0	0
918	MALAYSIA	1	0	0	0	0	1
919	MONGOLIA	0	0	0	0	0	0
920	NEA CALEDONIA	0	0	0	0	0	0
921	NEA GUINEA AND	0	0	0	0	0	0
922	NEA HEBRIDES	0	0	0	0	0	0
923	PHILIPPINES	3	0	0	0	1	4
924	PORTUGUESE TIMO	0	0	0	0	0	0
925	REMYN ISLANDS	0	0	0	0	0	0
926	SINGAPORE	1	0	0	0	3	4
927	TAILAND	3	0	0	0	0	3
928	TONGA	0	0	0	0	0	0
929	VIETNAM (NORTH)	0	0	0	0	0	0
930	VIETNAM (SOUTH)	0	0	0	0	0	0
931	WESTERN SAMOA	0	0	0	0	0	0
	TOTAL	81	20	15	254	370	

Exhibit 11

Total Subsidiaries by Geographic Location and Principal Customer of Sales in 1976

SALES TO PARENT	< 10%	10%-50%	> 50%	UNKNOWN	TOTAL
CODE					
COUNTRY					
1 INTERNATIONAL (	0	0	0	0	0
1 ZZ-(OLD) ASIA A	0	0	0	0	0
1 ZZ-(OLD) EUROPE	0	0	0	0	0
1 ZZ-(OLD) WESTER	0	0	0	0	0
101 AUSTRALIA	3	1	2	11	17
102 CANADA	5	2	2	35	44
103 NEW ZEALAND	2	0	0	2	4
104 PHOENIX	0	0	0	3	3
105 ST. PIERRE AND	0	0	0	0	0
106 SOUTH AFRICA	3	0	0	8	11
107 SOUTH WEST AFRI	0	0	0	0	0
108 UNITED STATES	0	1	0	23	24
109 ANTIGUA	0	0	0	0	0
200 CENTRAL AMERICA	0	0	0	0	0
200 ZZ-(OLD) BRITIS	0	0	0	0	0
202 BAHAMAS	0	0	0	0	0
203 BARBADOS	0	0	0	0	0
204 BERMUDA	0	0	0	2	2
205 BELIZE (BRITISH	0	0	0	0	0
205 BRITISH HONDURA	0	0	0	0	0
206 CARAL ZONE (PAN	0	0	0	0	0
207 COSTA RICA	0	0	0	0	0
208 CUBA	0	0	0	1	1
209 DOMINICA	0	0	0	0	0
210 DOMINICAN REPUB	0	0	0	0	0
211 EL SALVADOR	0	0	0	0	0
212 GRENADA	0	0	0	0	0
213 GUATEMALA	0	0	0	0	0
214 GUATEMALA	0	0	0	0	0
215 HAITI	0	0	0	0	0
215 HONDURAS	0	0	0	0	0
217 JAMAICA	0	0	0	1	1
218 MARTINIQUE	0	0	0	0	0
219 MEXICO	2	2	0	8	12
220 DUTCH (NETHERLA	1	0	0	1	2
220 DUTCH (NETHERLA	0	0	0	0	0
220 NETHERLANDS (DU	0	0	0	0	0
220 NETHERLANDS (DU	0	0	0	0	0
221 NICARAGUA	0	0	0	0	0

Exhibit 11 continued

CODE	COUNTRY	SALES TO PARENT	< 10%	10%-50%	> 50%	UNKNOWN	TOTAL
222	PANAMA	0	0	0	0	1	1
223	PUERTO RICO	0	0	0	0	0	0
224	ST. KITTS-NEVIS	0	0	0	0	0	0
225	ST. LUCIA	0	0	0	0	0	0
226	ST. VINCENT	0	0	0	0	0	0
227	TRINIDAD AND TO	0	0	0	0	0	0
228	VIRGIN ISLANDS	0	0	0	0	0	0
300	LATIN AMERICA (	0	0	0	0	0	0
301	HOLIVIA	0	0	0	0	0	0
302	CHILE	1	0	0	0	2	3
303	COLOMBIA	2	0	0	0	4	6
304	EQUADOR	0	0	0	0	0	0
305	PERU	1	0	0	0	3	4
306	ARGENTINA	4	0	1	0	5	10
307	BRAZIL	4	0	1	0	8	13
308	FRENCH GUIANA	0	0	0	0	0	0
309	BRITISH GUYANA	0	0	0	0	0	0
309	BRITISH GUYANA	0	0	0	0	0	0
309	GUYANA (BRITISH	0	0	0	0	0	0
309	GUYANA (BRITISH	0	0	0	0	0	0
310	PARAGUAY	0	0	0	0	0	0
311	DUTCH GUIANA (S	0	0	0	0	0	0
311	SURINAM (DUTCH	0	0	0	0	0	0
312	URUGUAY	3	0	0	0	0	3
313	VENEZUELA	3	0	0	0	4	7
401	BELGIUM	2	0	1	0	2	5
402	FRANCE	2	3	0	0	17	22
403	GERMANY (WEST,	4	1	2	0	9	16
404	ITALY	1	0	0	0	10	11
405	LUXEMBOURG	0	0	1	0	0	1
406	NETHERLANDS	1	1	0	0	2	4
407	IRELAND	1	0	0	0	5	6
408	Iceland	1	1	0	0	4	6
409	UNITED KINGDOM	4	4	4	0	38	50
410	AUSTRIA	1	0	0	0	3	4
411	CYPRUS	0	0	0	0	0	0
412	FINLAND	2	0	0	0	0	2
413	GREECE	0	0	0	0	2	2
414	ICELAND	0	0	0	0	0	0
415	LICHTENSTEIN	0	0	0	0	0	0

Exhibit 11 continued

COIN	COUNTRY	< 10%	10%-50%	> 50%	UNKNOWN	TOTAL
416	MALTA	0	0	0	0	0
417	MURACO	0	0	0	0	0
418	NORWAY	2	0	0	1	3
419	PORTUGAL	0	0	0	2	2
420	SPAIN	1	0	1	6	8
421	SWEDEN	1	0	0	5	6
422	SWITZERLAND	3	1	0	4	8
501	ALBANIA	0	0	0	0	0
502	ANDORRA	0	0	0	0	0
503	BULGARIA	0	0	0	0	0
504	CZECHOSLOVAKIA	0	0	0	0	0
505	GERMANY (EAST)	0	0	0	0	0
506	GIBALTAR	0	0	0	0	0
507	HUNGARY	0	0	0	1	1
508	POLAND	0	0	0	1	1
509	ROMANIA	0	0	0	1	1
510	SAN MARINO	0	0	0	0	0
511	USSR (RUSSIA)	0	0	0	0	0
512	YUGOSLAVIA	0	0	0	0	0
601	ALGERIA	1	0	0	1	2
602	IRAN	0	0	0	1	1
603	IRAQ	0	0	0	0	0
604	KUWAIT	0	0	0	0	0
605	LIBYA	0	0	0	0	0
606	QATAR	0	0	0	0	0
607	SAUDI ARABIA	0	0	0	1	1
608	SERIA	0	0	0	0	0
609	TRUCIAL STATES	0	0	0	0	0
610	EMIRATI	0	0	0	0	0
611	CHAD	0	0	0	0	0
612	DUBAI	0	0	0	0	0
613	DUBAI	0	0	0	0	0
614	ISRAEL	0	0	0	0	0
615	JORDAN	0	0	0	0	0
616	LEBANON	0	0	0	0	0
617	MALI	0	0	0	0	0
618	MADAGASCAR	0	0	0	0	0
619	MOROCCO	1	0	0	0	1
620	MUSCAT AND OMAN	0	0	0	0	0
621	NIGER	0	0	0	0	0

Exhibit 11 continued

CONF	COUNTRY	SALES TO PAPPIET	< 10%	10%-50%	> 50%	UNKNOWN	TOTAL
622	SOMALI REPUBLIC		0	0	0	0	0
623	ADEN (SOUTHERN)		0	0	0	0	0
623	SOUTHERN YEMEN		0	0	0	0	0
624	SPANISH NORTH A		0	0	0	0	0
625	SUDAN		0	0	0	0	0
624	TURKISH		0	0	0	1	1
627	TURKEY		1	0	0	0	1
623	EGYPT (UNITED A		0	0	0	2	2
624	UNITED ARAB REP		0	0	0	0	0
623	YEMEN		0	0	0	0	0
701	AFGHANISTAN		0	0	0	0	0
704	CHINA		0	0	0	0	0
703	INDIA		1	0	0	2	3
704	MALDIVES ISLAND		0	0	0	0	0
705	NEPAL		0	0	0	0	0
705	PANAMA		0	0	0	1	1
707	SEYCHELLES		0	0	0	0	0
704	SRI LANKA		0	0	0	0	0
704	MALAGASY		0	0	0	0	0
800	AFRICA (N.F.S.)		0	0	0	0	0
800	ZZ-COUD; CEYRA		0	0	0	0	0
800	ZZ-COUD; EAST A		0	0	0	0	0
800	ZZ-COUD; NORTH		0	0	0	0	0
800	ZZ-COUD; WEST A		0	0	0	0	0
801	AFRICA AND ISSAS		0	0	0	0	0
801	FRENCH SOMALIA		0	0	0	0	0
802	ANGOLA		0	0	0	0	0
803	BOTSWANA		0	0	0	0	0
804	IBRUDI		0	0	0	0	0
805	CAMBODIA		0	0	0	0	0
800	CAPE VERDE ISLA		0	0	0	0	0
800	CENTRAL AFRICAN		0	0	0	0	0
800	CUBAN ISLANDS		0	0	0	0	0
800	COLOM; FRENCH		0	0	0	0	0
800	FR. COLO (PRA		0	0	0	0	0
810	GAMBIA		0	0	0	0	0
811	GUINEA BISSAU		0	0	0	0	0
812	GUINEA		0	0	0	0	0
813	GUINEA		0	0	0	0	0
814	GUINEA		0	0	0	0	0

Exhibit 11 continued

SALES TO PARENT	CODE	COUNTRY	< 1%	10%-50%	> 50%	UNKNOWN	TOTAL
	815	GHANA	0	0	0	0	0
	816	GUINEA	0	0	0	0	0
	817	IVORY COAST	0	0	0	0	0
	818	KENYA	0	0	0	1	1
	819	LESOTHO	0	0	0	0	0
	820	LIBERIA	0	0	0	0	0
	821	MADAGASCAR REPUBL	0	0	0	0	0
	822	MAJAKI	0	0	0	0	0
	823	MAURITIUS	0	0	0	0	0
	824	MOZAMBIQUE	0	0	0	1	1
	825	NIGERIA	0	0	0	0	0
	826	PORTUGUESE GUIN	0	0	0	0	0
	827	REUNION	0	0	0	0	0
	828	RUANDA	0	0	0	0	0
	829	SAO TOME AND PR	0	0	0	0	0
	830	SENEGAL	0	0	0	0	0
	831	SIERRA LEONE	0	0	0	0	0
	832	SWAZILAND	0	0	0	0	0
	833	TANZANIA	0	0	0	0	0
	834	TOGO	0	0	0	0	0
	835	UGANDA	0	0	0	0	0
	836	UPPER VOLTA	0	0	0	0	0
	837	ZAMBIA	0	0	0	0	0
	838	CONGO, BELGIAN	1	0	0	1	2
	839	PER. CONGO (ZAI)	0	0	0	0	0
	836	ZAMBIA (REP. OR	0	0	0	0	0
	839	MADAGASCAR	0	0	0	0	0
	901	AFRICAN SAMOA	0	0	0	0	0
	902	BRITISH SOLOMON	0	0	0	0	0
	903	KRUMBI	0	0	0	0	0
	904	AFRICA	0	0	0	0	0
	905	CAMBODIA	0	0	0	0	0
	906	CHINA (HAINLAND	0	0	0	0	0
	907	CHINA (TAIWAN)	0	1	0	1	2
	907	TAIWAN	0	0	0	0	0
	908	FIJI	0	0	0	0	0
	909	FRENCH POLYNESI	0	0	0	0	0
	910	GUAY	0	0	0	0	0
	911	HONG KONG	0	0	0	0	0
	912	INDONESIA (2RD	0	0	0	2	2

Exhibit 11 continued

SALES TO PARENT	< 10%	10%-50%	> 50%	UNKNOWN	TOTAL
CODE COUNTRY					
912 INDONESIA (1ST)	0	0	0	0	0
913 JAPAN	4	0	0	5	9
914 KOREA (NORTH)	0	0	0	0	0
915 KOREA (SOUTH)	0	0	0	1	1
916 LAOS	0	0	0	0	0
917 MACAU	0	0	0	0	0
918 MALAYSIA	1	0	0	0	1
919 MONGOLIA	0	0	0	0	0
920 SEA CALLEDONIA	0	0	0	0	0
921 NEW GUINEA AND	0	0	0	0	0
922 NEW HEBRIDES	0	0	0	0	0
923 PHILIPPINES	3	0	0	1	4
924 PORTUGUESE TIMO	0	0	0	0	0
925 RIDING ISLANDS	0	0	0	0	0
926 SINGAPORE	1	0	0	3	4
927 SWITZERLAND	3	0	0	0	3
928 THAI	0	0	0	0	0
929 VIETNAM (NORTH)	0	0	0	0	0
930 VIETNAM (SOUTH)	0	0	0	0	0
931 WESTERN SAMOA	0	0	0	0	0
TOTAL	77	18	15	260	370

Activity	Manufacturing	R&D	Sales	Other	Unknown	Exited	Total
<u>Sales to Parent and other affiliates</u>							
<10%	47	0	27	3	1		78
10%-50%	16	0	1	1	0		18
750%	14	0	1	0	0		15
Unknown	47	0	77	39	19	79	261
Total	124	0	106	43	20	79	372

Exhibit 12
Total
Total Subsidiaries
Classified by Principal
Activity and Sales to
Parents in 1976

HE18.5

HE18.5

.A34

no. DOT-TSC-

NHTSA-78-21

v.2 BORROWER

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Justice

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